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dell'Architettura**

ricerche e progetti  
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research and projects on  
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### 55 January-March 2021.

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n.	Id Code	date	Type essay	Evaluation		Publication
1	554	mag-20	Long	Yes	Peer (B)	Yes
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## NEXT ISSUE

### 56 April-June 2021.

#### School: pedagogy, language, society

**Edited by Elvio Manganaro, Francesca Belloni**

It seems far from pointless to go back to talking about school.

The recent health emergency has marked a moment of crisis for the *class unit* which, since the first half of the nineteenth century, has been the minimum dimension through which our culture has organized the mass education process.

The idea that a child's education should be mediated by a circumscribed community that accompanies him/her in the learning process has been put to the test by recent prescriptions on social distancing.

This concerns both pedagogical and spatial aspects – the remit of architecture. It did seem that the city could offer an answer to this crisis, in line with an idea of exchange between school and city that derived from the best experiences of the Sixties and Seventies. However, even this hypothesis, which prospectively seemed the most reasonable and capable of profoundly redesigning the current limits of the Italian school, soon evaporated, became unsettled among countless bizarre and imaginative solutions, and was forced to withdraw in the face of the didactic and spatial inertia of a far from dynamic educational establishment.

At this point, after the phase of contingent responses aimed at guaranteeing the return of students to the classroom, it is time to tackle the issue using a critical and scientific approach, trying to patiently unravel the complexity of an activity which is naturally subject to different disciplinary and ideological polarizations. Above all, it appears necessary to avoid the shortcut of proclamations and clichés, even those with a progressive pull.

That nothing will be the same as before, as we keep repeating to ourselves in chorus, is valid as an act of faith or an apotropaic formula and nothing else.

The times of architecture are not those of pandemics nor those of pedagogy, which in turn do not even correspond to the times of language. And the times of architecture are certainly not the times of the city.

Therefore, every society that takes care of educating the new generations must strive to periodically link together these areas, while shunning any scientific rigidities.

Consequently, it was decided to focus this issue on three lines of study, which more than others it seemed important to try to address in parallel: *pedagogy*, *language* and *society*; three areas that are autonomous in themselves, but also unquestionably dependent on the construction of spaces for learning and on the daily life of those who frequent them, first and foremost the children.

*Pedagogy because* it is more evident than ever that only a virtuous relationship between pedagogy and architecture can shape spaces for learning in which the environment itself is an “educator”, and because architecture is capable of favouring the narrative dimension of the teaching experience, to become a place of life, meetings, relationships and learning.

*Language because* if – with Loris Malaguzzi – “the environment is decisive with respect to acquisitions of an affective, cognitive and linguistic character”, never as now, in such a complex and plural society, does the codification or re-codification of a common linguistic code of learning, be it spatial or strictly verbal, seem to show implicit albeit profound relationships between the design vocabulary used for schools and verbal language, itself subject to continuous modifications due to cultural and social changes.

*Society because* the ideal objective of an educating society that takes on the responsibility, together with and beyond the school, for educating children finds its natural counterpart in the increasingly pressing demand from society to have children – and therefore future adult citizens – who are capable of acting responsibly, creatively, innovatively and effectively, individuals capable of acquiring new skills in a lifelong-learning process.

And in the background, always the motives of architecture, because this is an architecture journal and because it is believed that an effective point of view could be offered to pedagogues, educators and administrators starting precisely from the experiences of certain architects who, more than others, knew how to give the school theme a civil, symbolic, and figurative slant each time, starting precisely from the educational capacity of the space, its social value, with a searching attention to those ancestral intuitions which children, sooner than adults, develop towards the world they live in.

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This issue was conceived and edited by Domenico Chizzoniti. The articles indicated in the table on page 6 have been subjected to the Double Blind Peer Review procedure.

## Abstract

To reconstruct implies an act of courage. To reconstruct the city requires a responsible, patient, conscious and daring act of preserving memory and committing the future. The act of architecture is never neutral, it is also a partisan act. It is the architect's responsibility to move towards concrete actions through the project, which "case by case", refutes hypotheses, verifies ideas and advances theses. Reconstruction is a project.

## Keyword

Transformation — Memory — Calamity — Destruction — Project



**Fig. 1**  
Paul Klee, Flower on the rock,  
1940.

One of the most pressing issues of topical interest and civil commitment for architects and others concerns actions capable of stemming the consequences of deliberate or accidental violence against the city, of the intentional or involuntary cancellation of memory, a unitary collective fact that binds entire communities to the recognition of their places. It is also a fact that the theme of reconstruction, in such a condition, has assumed a significant weight in the development and transformation of the human environment. On the one hand, the rapid obsolescence of some of the elements that would have propped up the modern city refutes the thesis of the failure of reconstruction architecture – although many of the most important figures in modern architectural culture, from Le Corbusier to Perret, from Hilberseimer to Sharoun, from Gropius to Mies, etc., have worked along these lines. The lack of a unified and shared response in reconstruction policies is evident in the traumatic experiences of recent wars in Europe, on the Balkan front for example, which at the end of the last century generated a heated debate on the motive that introduced into the conflict unprecedented ways of deliberately destroying memory through the annihilation of symbolic elements: the bridge of Mostar or the siege of Sarajevo above all. If those events are now relegated to modern and contemporary history, in the present condition other factors intervene to raise awareness of reconstruction as a central theme in the architectural debate. Why reconstruction? It is a physiological action, which occurs naturally after a traumatic event. The actions that cause traumas are of apparently involuntary origin, such as rapid climate change, which some claim has a rather direct relationship with catastrophic events due, for example, to the seismic events that have recently been constantly undermining the human environment in

terms of intensity and frequency; or deliberate actions that, starting with the growing political and economic instability of ever-larger geographical regions in South and Middle East Asia, have generated scenarios where the systematic destruction of architectural heritage has now become a sad reality.

All these are determining factors in creating an unprecedented situation that invites architecture to question itself anew on how to operate within the built environment. This situation is aggravated by the processes of production and appropriation of space that affect the contemporary city. Phenomena such as building speculation and the privatization of land now seem to prevail as the only factors capable of influencing urban development. The very evolution of cities is proving to be less and less susceptible to conscious transformations in the contextual dynamics, but rather to rehashes, self-referential and unshared mutations, with assumptions that are now free and independent from those formal instances moved by the settlement characteristics of the urban structure of long duration. For this reason, there is the need to investigate methodological criteria capable of recovering, in the context of reconstruction processes, those qualities that have conditioned city life as positive factors. We are talking about qualities that are not only aesthetic and formal that the city, and its architecture, can offer, but rather elements of social, economic, productive, civil emancipation, we would say, able to critically transmit that latent identity contained within the elements that make up the urban structure. Thus, in constructing a future vision of the city, it would be the task of architecture to critically recover both the figurative characterizations and the structuring principles of the urban phenomenon. In this sense, reconstruction would mean resonating with the generative principles that have conditioned the construction of the city over time, thus establishing a dialectical relationship with tradition and modernity.

This issue of FAM is dedicated to this theme. The construction of this theme has taken place through a slow and patient search for current issues revolving around reconstruction. Episodes and facts that lie within the recent events of the tragic earthquake in the Irpinia region in 1980, where some evidence of concreteness and scientific consistency still persists, starting from the comparison between the village and the city, Castelnuovo di Conza and Naples, placed at the centre of the research on reconstruction that has mobilised most of the best resources on the engineering and architectural front: historians of architecture and the city, structural and plant designers, town planners, landscape architects and architects. Lucio Barbera recounts this extraordinary experience of life and not only of operational research: reconstruction as a concrete act and timely response in the operational emergency phases, between consolidation and restoration, transformation and new construction, where the expectations of users do not always coincide with the aspirations of designers. And yet the two different perspectives of work between “Borgo and Città”, between the urban centre and rural village, show how in the scalar polarity of the two different interventions it is still possible to go back, not always in a linear way, from operational experimentation to certain principles and methodological assumptions of a problematic approach to the theme of reconstruction starting from concrete working hypotheses, admitted to the test of the project and its realisation and not so much from an alleged theory that imposes settlement models, behaviours and rules only abstractly theorised and occasionally put to the test of realisation.

Within the theme of reconstruction moves the work of Enrico Bordogna, on case studies around the problematic issue of the very recent earthquake in Central Italy in 2016. The controversy over the new provisional equipment, given to the local population in an illusory attempt to alleviate the drama of loss, has shown the contradiction of a model of intervention that bases on paternalism (public and private) a propensity to seek consensus rather than the will (or ability) to manage and govern the effects of the seismic event, not only in the emergency phase but also in the much more dramatic loss of identity of the community affected by the earthquake. In examining the question of reconstruction, this testimony points straight to the heart of the architectural issue, which poses the problem that has often been debated on both a theoretical and operational level in the conflict between the attitude of “where it was, how it was” and the latent risk of “false history”. This issue is addressed scientifically starting from the analysis of cases and concrete experiences in the field through the operational verification of the outcomes of the architectural project. An attempt to put in order an autochthonous experience of reconstruction (which would deserve much more space than that reserved here for this occasion) that tackles the problem with all the trappings of scientificity starting with a critical and dialectical comparison of the attempts made in the reconstruction of the Messina earthquake of 1908, and subsequently the emblematic case of Belice in 1968, to the devastation of Friuli in 1976, Irpinia in 1980, up to the recent cases of L’Aquila in 2009, Emilia Romagna in 2012 and the most recent one, a few years ago in 2016, which concerned central Italy, between Marche, Lazio, Umbria and Abruzzo. Here the problematic approach places the obligation of experimental architectural verification, case by case, before the theoretical assumption of abstract precepts, measuring point by point the susceptibility of the architectural project, the adequacy of the conditions that the context offers to the ductility of the design and the peremptoriness of the creative architectural act, without any abstract preclusion, refuting, on the other hand, in the making of architecture the theoretical and operational questions that the theme of reconstruction poses to the practice of design. It is along these lines that the tests carried out for Amatrice should be understood, moving from even subtle questions of type-morphological relations to attempts at linguistic experimentation in the adoption of particular expedients in the figurative treatment of the elevations and the size of the buildings.

Along these lines, Tommaso Brighenti’s work also calls for a unified reflection on the act of reconstruction and community identity through the dislocation of strategic functions capable of revitalising a social fabric weakened by the consequences of the earthquake, both in the case of Amatrice and that of Norcia and Camerino. This fabric was rebuilt through the recomposition of revised and updated specific functional programmes able to support not only the weak local economy through innovative models of productive, commercial and tertiary settlements but also to shore up education, exhibition, sport and free time as a driving force for economic and cultural emancipation.

If in the European tradition the cases of Berlin, Dresden, Warsaw, and others, have placed a well-known and well-documented experience of work, there are other cases that on the theme of reconstruction have generated singular experiences that are by no means secondary to those conventionally documented by the literature in the post-war period. This is the Lusitanian case of Alvaro Siza’s reconstruction of Chiado, following the fire

that destroyed parts of the city between Baixa and Bairro Alto in August 1988. Siza's experience demonstrates how a critical reconstruction takes on the city's most subtle contextual incentives, rediscovering the richness of the historical stratification of the urban fabric and transforming this endowment into the re-discovery of a memory almost dissolved in the geometric rigour of the 1775 reconstruction. The selection of unpublished layers of the city is explored in its richness, also formal, in the articulation of the urban palimpsest, as if to decipher and revive through the project the peremptory and essential features of a complexity that would otherwise be lost.

Post-war European experiences on the theme of reconstruction have had different fates. The case of Vienna explored by Gundula Rakowitz is emblematic in recognising how the Planungskonzept Wien drawn up in the years 1958-1961 by Roland Rainer was a precursor of initiatives that virtually took on some of the fundamental features of the city's paradigms. Reconstruction along the course of a narrative capable of symbolically deciphering substantial traits of the urban fabric, by fragments, episodes, remnants of destruction that finds a possible narrative not in a chronological sense but in a qualitative one, by a critical and conceptual selection of the value, even iconological, of the architectural datum. A value in itself recognised in the planning of the Stadtentwicklungsplan Wien STEP 2025, which not only insists on the areas examined by Rainer, the area to the north-east of the city centre and the south-west but also assumes architectural determination and conceptual approach in the operation of the project as an instrument for implementing a design where form and structure still intervene to define the essential features of the city's future.

If we wanted to extend this trajectory from the Italian experience to Europe, Asia and America, the cases of Aleppo in Syria and Mosul in Iraq -very different cities that share a tragic destiny in the epilogue of the well-known "Syrian Crisis", which began in March 2011 – would become paradigmatic of what the theme of reconstruction and human dignity, represents in concrete planning action today, in the protection of a huge heritage torn apart by a deliberate act of violence. The cities of Aleppo and Mosul take on this ethical, rather than aesthetic, the frontier of making architecture, of recomposing the meaning of human things: houses, prayer, ritual, culture, life. And in this process, the form of life, like the form of people's things, takes on a significant value, because it becomes the act that helps the community to revive itself and reconsider the meaning of its existence following a deliberate and violent annihilation.

But in the current reconstruction process, there are natural events that cyclically, and recently more frequently, affect certain places most exposed to the effects of climate change. For example, these episodes in Central and South America have prompted architectural culture to tackle problems and issues that until recently were the exclusive preserve of other disciplines. Anna Irene Del Monaco gives an account of this interesting frontier of research on the relationship between design and reconstruction, where recursiveness becomes a variable that is not secondary in the problematic approach to this specific aspect of architectural design, grafting a greater degree of complexity than the models established in the literature and in the practices most accredited by the scientific community, regarding, for example, the issue of planning, prevention and maintenance of the entire settlement system, natural and artificial. Starting from the experience of the environmental and economic disaster caused by two successive hurricanes that struck the island of Puerto Rico in 2017, Hurricane Irma and

Hurricane Maria, this testimony documents a different frontier of work on reconstruction, with the commitment of Martha Kohen of the University of Florida and local research centres, which in recent years have shown how the question of reconstruction is susceptible to a much broader vision and how it is possible to explore some unprecedented aspects of the ordinary paradigm on the approach to the “reconstruction theme”.

As a conclusion to this perhaps bumpy itinerary, we should pause for a moment and rethink the role and meaning of our approach to this specific aspect of our work.

If there is still a faint trace of artistic value on this extraordinary theme, Bruno Barla Hidalgo’s essay turns the point of view upside down, from an extraordinary observatory such as the Valparaíso school in Chile, which “literally” looks at this world upside down. Sign and light as a creative act from the centre of the earth to its surface, in a process of “poiesis” where the object of the creative act is experienced in its deepest etymological meaning and adherent to doing, to the Greek “poieo”: inventing, composing, creating, even in verse. A poetic act that has not only the value of creation, it manages to go beyond it, intrinsically linked to generating, to generativity; by its very nature, it presupposes a meeting between at least two entities, which give life to a third: the project, a world project for Barla, on the margins, on the edge overlooking the Pacific of an entire continent. So poiesis also takes on the meaning of “poetising”, transforming suffering – where things are devitalised and unchangeable – into new stories, new contexts, new worlds composed of poetic acts capable of vibrating the senses, restoring vitality to things, opening up to other worlds. In this way, it is possible to grasp the vital impulse, towards others and towards the world, that the poet, or the architect, preserves and keeps alive alongside the suffering and the wounds of a destructive natural event, which is revealed in its beauty, leaving in the beholder that sense of fascination, emotion and wonder that one feels when looking at the flower that grows and blossoms on the rocky edges of the ocean.

Domenico Chizzoniti is an architect and obtained his PhD from the IUAV in 2001. He is currently a Full Professor of Architectural and Urban Design at the ABC Department of Politecnico di Milano. He is the Head of the Master Course in "Architecture and Urban Design" (ADU) - AUIC School. He is the coordinator of the series of Architectural Composition Theories (TECA). The results of his research work are collected in more than 150 scientific papers and in several international books and essays.

Enrico Bordogna  
**Earthquakes, natural disasters, reconstruction strategies**

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Abstract

This essay examines a reconstruction strategy in response to the earthquake which struck Central Italy in the summer-autumn 2016. After a survey of the main earthquakes in Italy in the last century, from Messina in 1908 to Emilia Romagna in 2012, we examine the case study of the historical nucleus of Amatrice, a walled town of Frederick-Angevin origin lying along a ridge. Faced with the clean slate left by the earthquake, a reconstruction from scratch of the entire historical town comes up against the theoretical and operational problem of the conflict between rebuilding “where it was, as it was” and the risk of producing a “historical fake”, which this essay addresses both in theoretical terms and through an operational verification of the architectural project.

Keywords

Earthquakes — Reconstruction Strategies — Natural Disasters

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The issues that a catastrophic event raises, whether the latter resulted from war or was of natural origin, are many and rather complex.

Outwith the emergency phase, the issues are of a very different stamp, yet are closely intertwined: questions of an economic nature which concern the productive, agricultural, industrial, and commercial bases of the context affected, along with the associated infrastructural network; urban planning aspects, from territorial and district levels to the municipal level, and the executive plans of individual building sectors; more strictly architectural issues of a morphological, typological, and formal nature, which in turn necessarily involve problems of earthquake engineering and the stances of restoration vs. conservation; the basic residential fabric and local services and, at the same time, the monumental emergences and the pattern of streets and public spaces, with their own phenomena of damage and restoration/reconstruction needs. And behind or alongside all of this, the associated legislative-executive and procedural-managerial framework, with various bodies in charge of the emergency and reconstruction phases, plus the conflict between the prevalence of the central State or the primacy of local self-government, the affected populations and their ad hoc organizations.

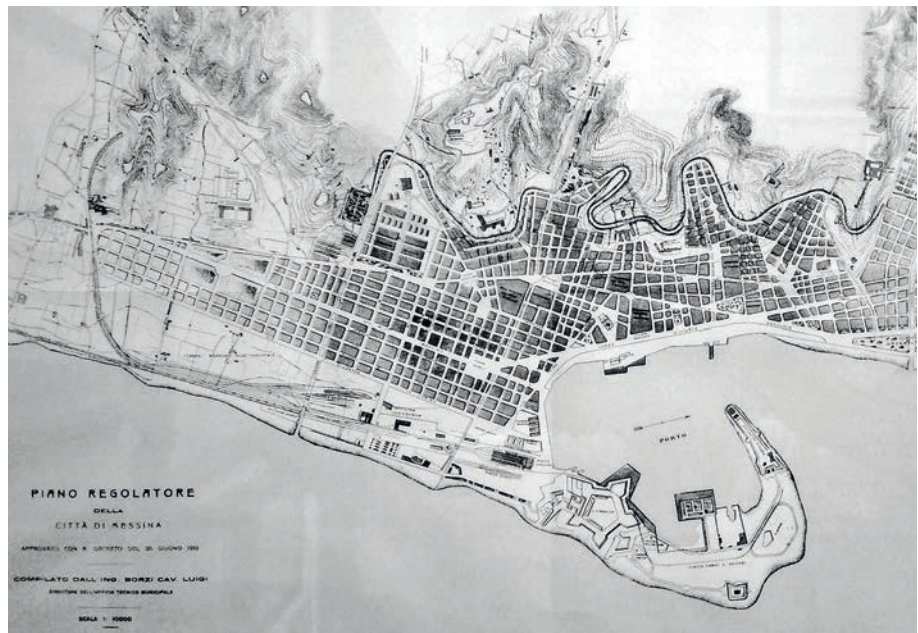
As we can see, an almost indissoluble intertwining.

In addition, the dedicated literature also presents a comparable complexity, as temporally vast as it is and fraught with very varied points of view and degrees of approach, not all easily disentangled and recomposed.

It may be easier to orient ourselves if we adopt a specific design stance, reflecting operationally on what the reconstruction strategies were after the main seismic events of last century and the first decades of this century, evaluating the outcomes, the positive aspects, and the most problematic

**Fig. 1**

Luigi Borzi, Master Plan for the reconstruction of Messina, 1910.



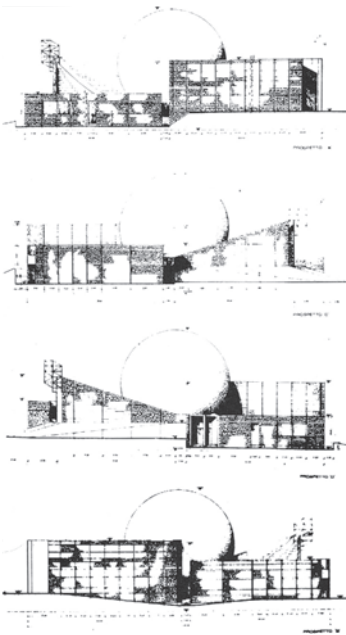
or decidedly negative objective difficulties, the complexities of boundary conditions, aporias, and any success stories. And all of this starting from a concrete case, that of the earthquake which struck Central Italy in the summer-autumn of 2016, with this analysis being steered by the objective of elaborating intervention, urban planning, and architectural projects, which, even in an informed didactic experiment, must tackle the problems and difficulties concretely, verifying possible answers as a part of the project.

#### *Earthquakes and reconstructions in Italy in the 1900s*

Regarding the events of last century, we can begin with the Messina earthquake of 28 December 1908. With a magnitude of 7.2, around 90,000 dead and 100,000 displaced, it struck both cities of the Strait, Messina and Reggio Calabria, resulting in an almost total destruction of the former. The reconstruction plan drawn up by the engineer Luigi Borzi, dated 1910, flanked by important architectural work from Francesco Valenti, corresponded to the pre-earthquake morphology which dated back to the 1869 Spadaro Plan, re-proposing the same planimetric and topographic checkerboard layout of elongated rectangular blocks, while bringing the architectural conformation into line with the compositional criteria, building density and contemporary construction methods of the time. To this end, the Plan introduced precise urban planning regulations regarding the width of the roads (a minimum of 10m) and the height of new buildings according to the section of street they overlooked, while complying with the anti-seismic regulations strictly imposed immediately after the disaster by special Royal Decrees. A reconstruction which, despite conflicting opinions, was for the most part evaluated positively, at least until the 1950s, and even more so when compared with the betrayed city of the following decades<sup>1</sup>. In this line of intervention, the reconstruction of the seafront, the historic “Palazzata” was of an emblematic value. Beginning from an initial intervention in the 1930s by the architects Camillo Autore and Giuseppe Samonà, the work continued in the following decades up until the early 1960s, with the construction by Giuseppe Samonà of 11 city blocks, characterized by the same line of eaves and an accentuated compositional homogeneity marked by a modern architectural approach, in some ways referable to what has been defined “Perret-style structural classicism”, to be

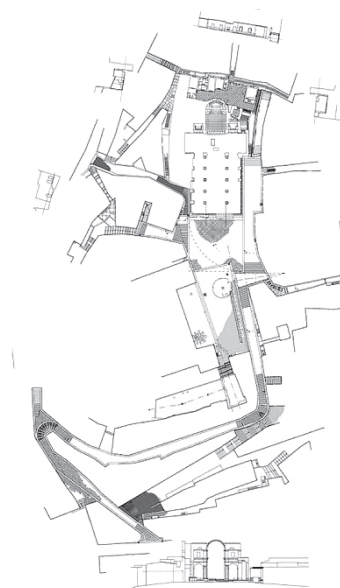
**Fig. 2 a-b**

Giuseppe Samonà, Palazzata di Messina, Block IX, Inps Offices, 1956-58, view and detail.

**Fig. 3-4**

Ludovico Quaroni, Luisa Anversa, Project of the Mother Church, Gibellina, 1970-1972.

Franco Purini, Laura Thermes, System of Squares, Gibellina, 1982-1990.

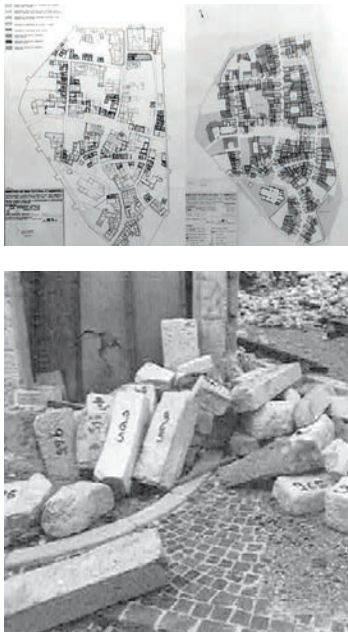
**Fig. 5**

Alvaro Siza, Roberto Collovà, Restoration and conservation of the Mother Church, Salemi, 1982.

found equally in the contemporary INAIL building in Venice by Samonà and Egle Trincanato.

The case of the Belice quake in January 1968, with a series of aftershocks continuing until February 1969, is more complex and many-sided. With a magnitude of 6.4, around 300 deaths and 70,000 displaced persons, it hit the municipalities of the valley hard, and with differing intensity a series of neighbouring territories in the provinces of Agrigento, Trapani, and Palermo. Compared to the municipalities which had virtually disintegrated, such as Gibellina, Poggioreale, Montevago, Santa Margherita del Belice, others suffered damage of a lesser severity, limited to single parts of the inhabited areas or individual monumental buildings. As a result, also the kind of reconstruction differed, with some cases of newly founded towns at a greater or lesser distance from the pre-existing centres, designed (mostly by the architects and urban planners of ISES, the Italian Institute for Social Housing Development) according to architectural and urban planning schemes based on models unrelated to local tradition, of an abstract Nordic or Anglo-Saxon derivation, and other cases of partial “additions”, with the reconstruction of individual city parts or monumental complexes, alongside more measured and meticulously designed interventions.

Among the newly founded towns, the brand-new *Gibellina Nuova* certainly stands out. Rebuilt about fifteen kilometres below the historical Gibellina, its plan based on a butterfly design is considered not entirely successful and is arguably too sprawling, featuring a series of terraced houses between a pedestrian street in front and a roadway for cars behind. It is however somewhat redeemed, thanks to the tenacious will of an enlightened mayor, Ludovico Corrao, by a sequence of interventions of great artistic and architectural quality. These include the piazzas of Purini and Thermes, the architecture of the public buildings by Samonà, Quaroni, Gregotti, Francesco Venezia, Marcella Aprile, Roberto Collovà, the urban sculptures of Pietro Consagra, Mimmo Paladino, Fausto Melotti, Emilio Isgrò, Nanda Vigo, Alessandro Mendini, and the extraordinary land art masterpiece of Alberto Burri on the remains of the devastated and abandoned historical Gibellina. Meanwhile, the reconstruction of Poggioreale (one of those cases where the bulldozers may have done more damage than the earthquake) has more formalistic implications, both in its urban design and its architectural features,



**Fig. 6 a-b-c**

Venzone, the historical center rebuilt, after the refusal of the inhabitants to remove the rubble, in the ancient typology and with the recovery of recognizable materials. Gianfranco Caniggia, Francesca Sartogo, "Ricerca storico-critica per la ricostruzione e il restauro del centro storico di Venzone", 1977-79: analysis tables and design scheme.



with a new town built just below the ancient settlement.

The case of Salemi is different again, where Siza and Collovà's intervention on the Mother Church, of a great poetic impact, marks an original line in the face of a stricken monument, which is not that of restoration or completion through anastylosis, but rather of an "archaeological" conservation, after being amputated by the earthquake; a sublimated memory and perpetuation into the future of the community value of the maimed original.

Conflicting opinions, therefore, which, far from being satisfactorily settled, require a differentiated and closer assessment case by case<sup>2</sup>.

Just a few years later, in May 1976, with repetitions in September that same year of equal violence which definitively cancelled what had been spared by the first shock, came the earthquake in Friuli, with a magnitude of 6.5 on the Richter scale. This resulted in around 1,000 deaths and 45,000 displaced people and affected over 40 municipalities declared as disaster zones, with another thirty gravely damaged in the provinces of Udine and Pordenone, including Gemona, Venzone, Osoppo, Majano, Artegna, Buja, and Bordano, which were among the worst affected.

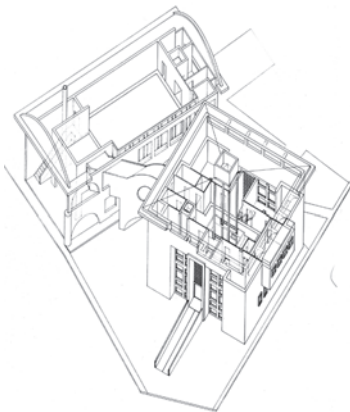
The case of Friuli is considered a turning point in post-seismic strategies. Without falling into the rhetoric of the so-called "Friuli Model", or the abused simplification of the slogan "where it was, as it was", relativized by the protagonists of that reconstruction themselves, suffice it to recall that after that event the Civil Defence organization [It. *Protezione Civile*, t/n] took shape, both centrally and regionally, in direct contact with the local communities involved. We should also remember the decisive choice, vigorously desired by the population concerned, and repeated several times but not always respected, to proceed "bottom-up", according to a sequence which first favoured production, then housing, and lastly the monuments.

An exemplary case is that of Venzone. There, based on studies carried out by Gianfranco Caniggia and Francesca Sartogo appointed shortly after the earthquake by the Ministry of Cultural and Environmental Heritage, the Archaeological Superintendence of Trieste for Environmental, Architectural, Artistic and Historical Heritage of Friuli Venezia Giulia, and the Italian Council of ICOMOS (International Council of Monuments and Sites) to carry out historical-critical research for the reconstruction and restoration of the historic centre of Venzone, we can witness what is arguably the recon-



**Fig. 7 a-b-c**

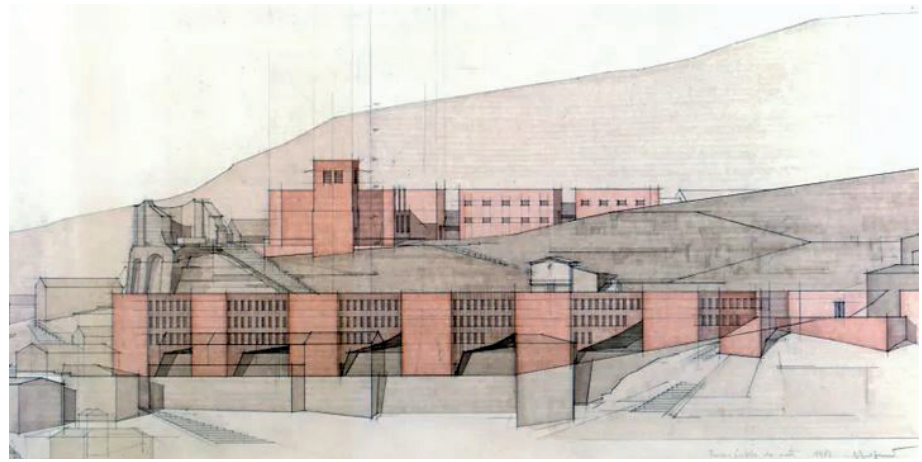
Luciano Semerani, Gigetta Tamaro, Osoppo Town Hall, 1978-79, in the center reconstructed and axonometric view.



struction closest to a full-blown “where it was, as it was”. An exact restoration of the morphological arrangement of public spaces, streets, squares, and alignments; a rebuilding of the basic buildings of the residential fabric in accordance with typological processes studied by Caniggia-Sartogo and the resulting detailed plan of the Old Town by Romeo Ballardini. With a reconstruction by anastylosis, after meticulously collecting, cataloguing and numbering the stones left by the earthquake belonging to the main monuments (the cathedral, town hall, other churches, walls, towers, and town gates), and thanks also to the studies and role of such scholars as Francesco Doglioni, the final result is an example of a sophisticated “normality” which is unquestionably convincing, beyond, or in any case preponderant with respect to, the scruple of a supposed sin: the “historical fake”<sup>3</sup>.

If Venzone, both in the reconstruction of its urban centre and its monuments, can be considered an emblematic example of “where it was, as it was”, other cases of the Friulian reconstruction are the same but in less complete terms, such as Gemona, penalized by a consistent exodus of the population in a fragmented proliferation of buildings below, or Osoppo, where the town hall by Luciano Semerani and Gigetta Tamaro stands out, a happy expression, as Semerani stated, of the will of the inhabitants, but not without “a justified rhetoric”, to build against the violence of the earthquake “the most beautiful and longest-lasting town hall in Friuli”, even within an on-site reconstruction that did not present characteristics of rigour and coherence comparable to those at Venzone<sup>4</sup>.

The Irpinia earthquake in November 1980, with a magnitude of 6.9 on the Richter scale, around 1,900 deaths and 300,000 displaced persons, affected the provinces of Avellino, Salerno, Benevento and, to a lesser extent, Matera and Potenza. Ignoring cases like Conza or Bisaccia<sup>5</sup>, where the somewhat abstract modelling of certain ISES plans for Belice seems to have re-emerged, it was the case of Teora which implemented another possible line of “where it was, as it was”, different if not an alternative to the Friulian one in Venzone, but equally convincing in its desire to preserve the culture and settlement identity of the affected area. The project by Giorgio Grassi and Agostino Renna<sup>6</sup>, having taken stock of the collapses caused by the earthquake and of the areas officially declared unfit for building purposes on the basis of post-earthquake geological surveys, features a



**Figg. 8 a-b-c**

Giorgio Grassi, Agostino Renna, Recovery project of the historic center of Teora, 1981-83: project drawings, view.



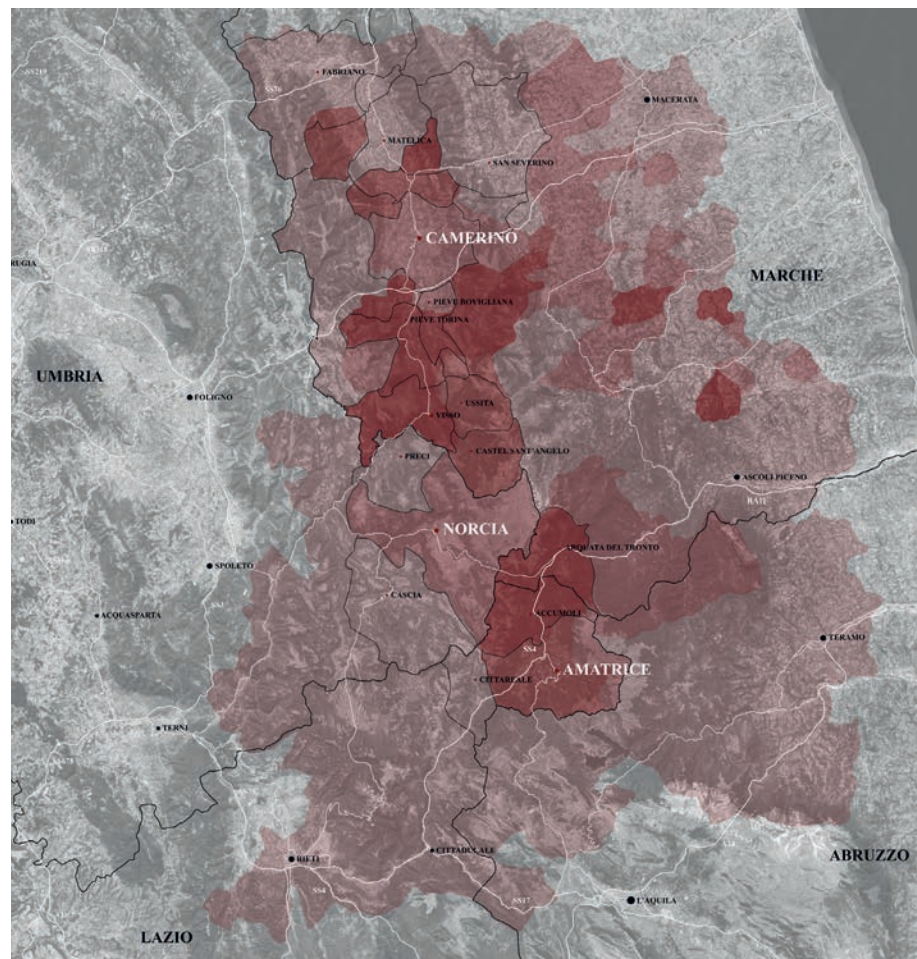
design which could be described as “continuity in discontinuity”, with interventions, typologies, and various works of architecture differentiated by unitary parts in a direct and concrete relationship between the old and the new: the ridge area between the castle and the Mother Church, declared unfit for building, left as an “archaeological” green area, with the remains of the collapses preserved as a memory and testimony of the event; the buildings and the fabric of the Old Town that had suffered minor damage and were included in the areas fit for building, entirely restored applying the principle of “where it was, as it was” (referred to explicitly in the project report, p. 136), based on archival documents, land registers, surveys, photographs; the monuments of the church and castle rebuilt from scratch *in situ*, the latter destined to be a residence, the Mother Church resuming the position of the old destroyed church which, preserved as ruins, became the churchyard of the new one; new residences concentrated in two distinct, self-contained units (below the main street and near the castle), characterized by a marked and essential stylistic unity so as to make them clearly evident and recognizable as separate parts of a strongly, programatically unitary urban project.

Finally, the most recent reconstructions of L’Aquila (after an earthquake in April 2009, of magnitude 5.9, with around 300 deaths and 80,000 displaced persons) and Emilia Romagna (May 2012) offer few points of reference, given the highly questionable model for L’Aquila, in terms of the settlement sprawl as well as engineering, typological and architectural aspects, of the 19 villages of the much publicized C.A.S.E. project (C.A.S.E. = Sustainable and Eco-compatible Anti-seismic Complexes), while in Emilia the arguably justifiable priority given to the restoration of a productive fabric which is among the most important in Italy inopportunately legitimized the disastrous distortion of a settlement and architectural culture of an ancient rural tradition consolidated over the centuries, from the days of Roman centuriation to our own times<sup>7</sup>.

#### *Towards a reconstruction strategy in Central Italy, 2016*

If these are the indications that can be drawn from the Italian experiences of the last century, the earthquake in Central Italy of 24 August 2016, with subsequent tremors and a seismic swarm in the autumn of the same year – but also the following year, involved circumstances and problems in part similar to the national case history of the last hundred years, in part entirely specific. Moreover, it has been observed several times and by several people that each seismic event is a case in itself, and that to identify a reconstruction strategy it is advisable to proceed according to a “case-by-case” approach.

The earthquake of magnitude 6.0 and subsequently 6.5, with around 300



**Fig. 9**

Crater area of the earthquake in Central Italy, summer-autumn 2016.

victims and 41,000 displaced persons, affected territories and municipalities across four regions, The Marches, Lazio, Umbria, and Abruzzo. This resulted in predictable difficulties from legislative, administrative and procedural points of view to organize and manage the interventions, not only in the emergency phase, but also in the start-up and management of the reconstruction works with their related general and executive plans. And this was a first element of distinction from past experience.

Conversely, from the point of view of the settlement characteristics, the affected territory (assuming the centres of Amatrice, Norcia and Camerino as the most emblematic case studies and examples of planning) presents widespread similarities with some of the earthquake zones of the past, albeit differentiated according to the specific internal characteristics of the individual centres concerned. As in Friuli and Irpinia, and not very differently from Belice, in fact, also the central-Italic crater, a vast area between the internal Apennine ridge and the settlements sloping down towards both the Adriatic and Tyrrhenian Seas, is characterized by a widespread urbanization of towns of medieval origin, regularly walled and clustered around a ridge, with medium-small or exceedingly small centres, scattered across inland hilly or mountainous areas<sup>8</sup>.

Inside the crater, however, disregarding the relative homogeneity of the whole, with reference to Amatrice, Norcia and Camerino, the respective economic structures are very different: that of Norcia marked by the importance of agri-food and dairy supply chains, starting from husbandry (especially of pigs) and agricultural crops, to the subsequent stages of transformation, packaging, and marketing of the related products, with a widespread network of small or even individual artisan and commercial



**Fig. 10**

Amatrice, historical center: view after the removal of the rubble, summer 2018.

companies. In pole position, that of Amatrice, oriented above all to activities related to tourism and second homes, with the important presence of a higher education facility in the hotel sector of supra-municipal and supra-regional importance; while Camerino, one of the largest of the affected centres, is characterized by the centuries-old tradition of a university town of 14<sup>th</sup>-century origin and the allied wealth of architectural and monumental presences, even if, in all of these centres, and in the whole area of the crater in general, the monumental component and the charms of the landscape are omnipresent.

The damage inflicted by the earthquake was also significantly different.

In Norcia and Camerino it was mostly concentrated in the historical nucleus. On the whole, it was more substantial in Camerino, with the almost complete and prolonged closure of the centre and serious damage to several important monumental buildings such as the Town Hall and the Cathedral; while it was more limited and circumscribed to single sectors instead in Norcia, albeit equally serious there in single monumental buildings such as the Cathedral. On the other hand, in both municipalities, outside the town's walls the damage was much more limited or virtually non-existent. However, both in Camerino and in Norcia, beyond their respective differences, the residential fabric of the historical nucleus remained intact, and although the damage had affected individual monuments and residential sectors, the centre remained completely recognizable and legible in its stratified urban morphology, including the houses, streets, squares, public spaces, and monuments. And this is an important, discriminating fact.

In contrast, Amatrice is a case all its own.

Because there the earthquake practically eliminated the historical nucleus, of which only the ridge axis remains recognizable – the “matrix route” to put it in Muratori/Caniggia's language, and little else: some sections of the churches, a part of the civic tower, a few remnants of houses. But the residential fabric has gone, perhaps also because, as Giovanni Carbonara lamented<sup>9</sup>, the bulldozers and the anxiety of removal did more damage than the actual earthquake.

Nor is the damage to the urban expansion outside the walls marginal, but what differentiates Amatrice from the other municipalities of the crater is the clean slate of its historical nucleus, and the consequent problem of



**Figg. 11 a-b**

Amatrice: plan of the historic core of the Gregorian Cadastre, first half of the 19th century, and the 2016 pre-earthquake regional technical map, with the historical core, the extra-moenia expansion of the second century and the Arnaldo Foschini complex built between 1921 and 1960.

whether and how to plan its reconstruction.

In other words, at Amatrice, the problem of reconstructing its historical nucleus is of a theoretical rather than operational nature.

*Amatrice. A reconstruction project for the ancient nucleus: where it was, as it was?*

Of Frederick-Angevin origin, founded, albeit without a certain date, in the first half of the 13<sup>th</sup> century as a garrison of the Via Salaria, a strategic military and commercial axis since Roman times linking the Adriatic and Tyrrhenian Seas, Amatrice has the pattern of a walled town clustered around a ridge, with its central axis running from the north-west – where the Castello gate used to enter from the areas of the Castellano stream below, to the south-east – where the Church of Sant’Agostino stands and the Carbonara gate beside it, in the direction of a plateau extending towards the Laga mountains, the Gran Sasso Apennines, and the Aquila basin below. Along the central axis with an almost rectilinear course, lies an orthogonal road network, with only two transverse axes and a grid of elongated rectangular blocks of homogeneous dimensions.

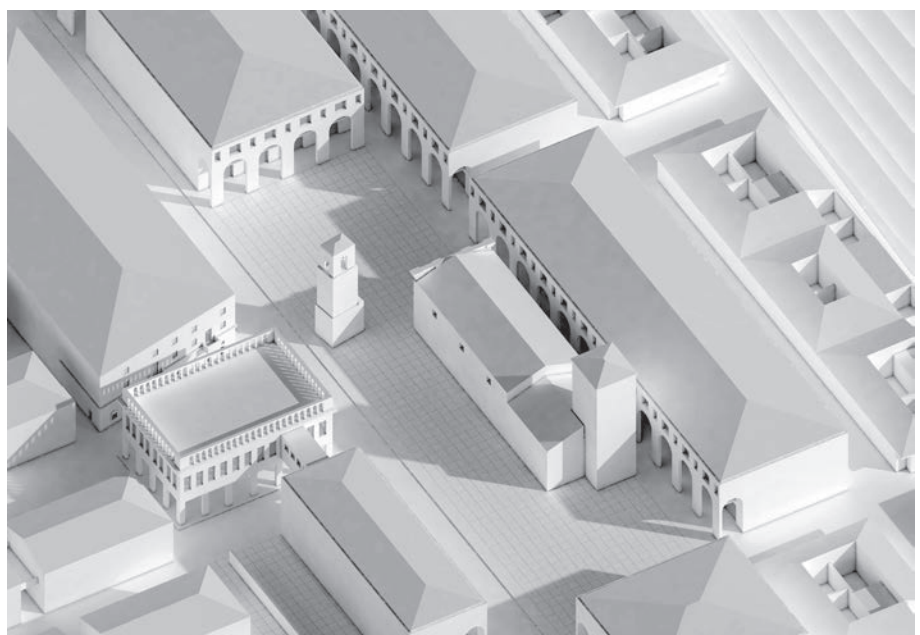
Lying on a sort of spur between the Tronto river to the north and the Torrente Castellano to the south, beyond the complex historical events in the progressive passage from Swabian to Angevin dominion, and then the Papal State with the destruction of the walls by the troops of Charles V in 1529, and despite the frequent earthquakes and subsequent reconstructions, what is important to note is that Amatrice has preserved its original ridge layout with a morphology substantially unchanged over the centuries. A morphology comparable to that of the nearby “New Lands” of Rieti (Antrodoco, Leonessa, Cittaducale) or of the more distant Florentine “New Lands” such as Arnolfo di Cambio’s San Giovanni Valdarno<sup>10</sup>.

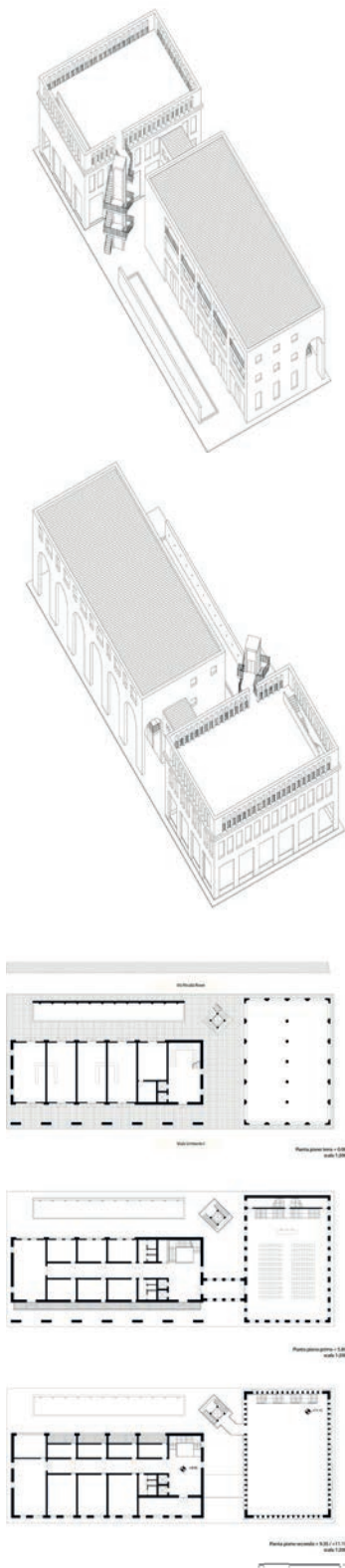
Given the condition of a substantially clean slate as can be seen from the photographic documentation from spring to summer of 2019, with a few monumental buildings classified for the collection and cataloguing of the rubble for the purposes of a conservative philological reconstruction (essentially the churches, the civic tower and two or three historical buildings)<sup>11</sup>, the choice made in some of the projects developed at the university was firstly that of an on-site reconstruction, discarding any hypothesis of relocation, and secondly, that of re-proposing the historical morphology of the settlement, with the corresponding perimeter of the former town’s walls, the axis of the ridge lying north-west–south-east, and the morphological pattern of elongated rectangular blocks<sup>12</sup>.

Having made this initial choice, however, the first theoretical problems arose: should the secondary street network respect the historical one, with

**Fig. 12 a-b-c**

Enrico Bordogna, Tommaso Brighenti, Reconstruction project of the historic center of Amatrice, 2019: plan; overall model; model of the central square with the church of San Giovanni and the civic tower rebuilt by anastylosis and the new town hall.





**Fig. 13 a-b**

Enrico Bordogna, Tommaso Brighenti, Reconstruction project of the historic center of Amatrice, 2019: axonometric views and plans of the Town Hall.

only two transverse axes not perfectly perpendicular to the ridge axis? And should the morphology of the blocks, with their respective access roads, respect the historical one, meaning continuous street fronts and substantially constant lines of eaves to mark the rectangular grid? Or, while confirming the central ridge axis, is it possible to think of a “modern”, rational, morphological layout, with a regularized road network and a consequently different arrangement of the blocks? And again, dropping down a scale, assuming the first option, should the architectural reconstruction of the residential blocks propose faithfulness to the pre-existing buildings also in the compositional choices and formal aspects (heights, ways of roofing, elevations, materials, construction systems, etc.), or opt for a “modern”, rational reconstruction?

In other words, having stuck faithfully to the principle of “where it was”, is that of “as it was” perhaps not impracticable? And does it perhaps not necessarily require methods that are contemporary, albeit respectful of the urban and architectural forms inherited from history, not in “literal” terms, but “substantial” terms? Though aware that the qualification “substantial” can only fall within the sphere of the subjective and the discretionary.

In other words (and very schematically), is Caniggia’s model for Venzone valid? That of philological faithfulness at the risk of a historical fake? Or is the Teora model of Grassi and Renna, of “continuity in discontinuity” as previously observed, better?

The two projects presented here, the result of participation in conferences and the presentations of graduation theses<sup>13</sup>, are concrete answers, with the absolute awareness of not wishing to be definitive but wishing to clarify “in doing” the theoretical and operational issues which a theme such as that of reconstruction imposes on the planning obligation.

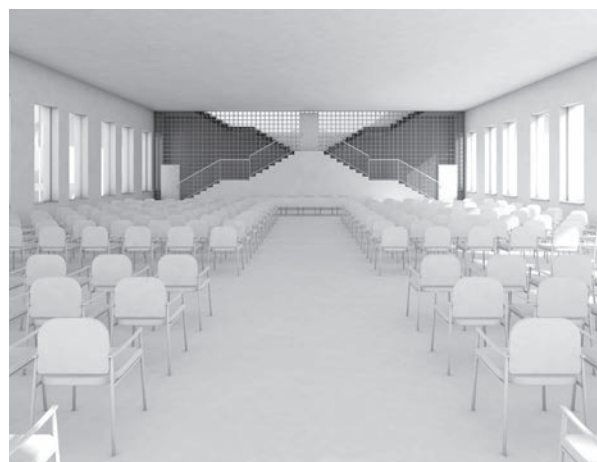
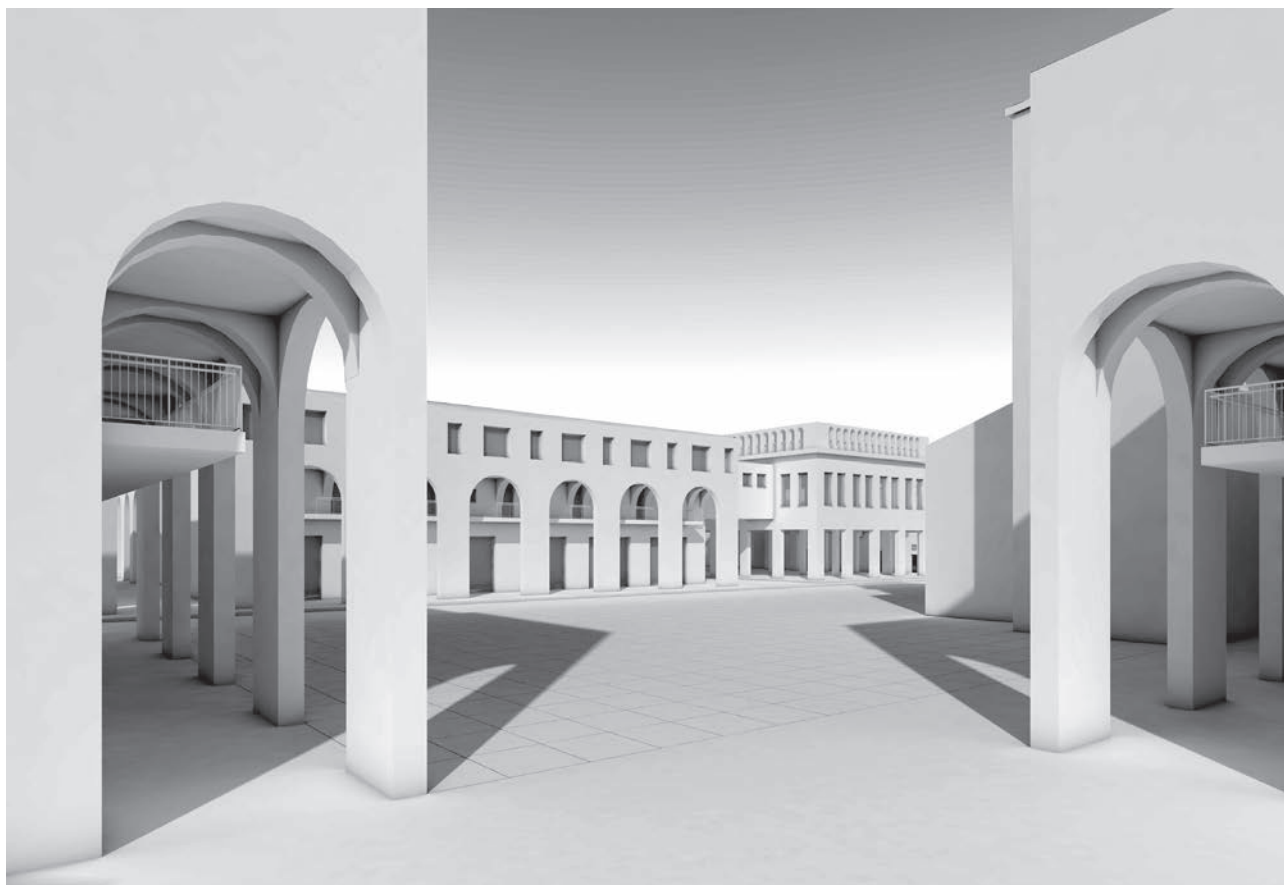
#### *Two projects as experimental verification and a theoretical study*

Faced with the current clean slate, both projects have assumed the hypothesis of generally confirming the morphology inherited from the past, retracing the perimeter of the walled town which has remained substantially unchanged from the time of its foundation (despite the 16<sup>th</sup>-century destruction of the walls), and introducing some – but few – variants concerning, on the one hand, the central square, and on the other, the conformation of the residential blocks, to configure a hypothesis for the reconstruction which is both up-to-date and respectful of the historical settlement while remaining rooted in the collective memory of the population.

In particular, for the residential fabric, both projects stop at the proposal of three typological schemes of blocks, roughly defined as “block-style”, “terraced”, “patio-style”, with two or three storeys above ground, to be adopted flexibly as simple guidelines in the reconstruction process.

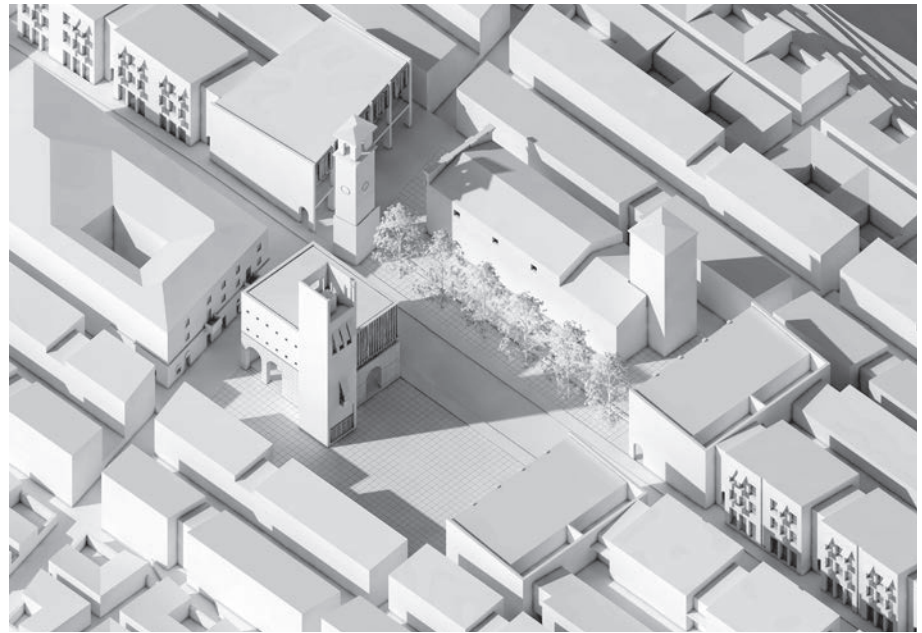
However, these schemes, albeit agreed on as a basic morphological choice, clearly demand further study. The design of the central public square deserves a partially different evaluation.

In an urban environment characterized by the presence of the Church of San Giovanni, the civic tower and the town hall, mingled with a dense and undifferentiated fabric before the earthquake, both projects introduce the thinning of a porticoed square straddling the course of the ridge, in which these emergences stand out in isolation. A choice which consciously introduces a double “infringement”: in fact, the historical town of Amatrice, unlike the majority of the Rieti and Florentine New Lands, did not have a central public square with the monumental emergences of civil and re-



**Fig. 14 a-b-c-d**

Enrico Bordogna, Tommaso Brighenti, Reconstruction project of the historic center of Amatrice, 2019: views of the central square and Corso Umberto; views of the council chamber and the roof-terrace of the Town Hall.



**Fig. 15 a-b**

Luca Bonardi, Andrea Valvason, "The ancient nucleus of Amatrice: where was it, how was it?": View of the central square with the church of San Giovanni and the civic tower rebuilt by anastylosis and axonometric section of the Town Hall, Degree thesis, Politecnico di Milano, June 2020 (supervisors E. Bordogna, T. Brighenti).

ligious power; in addition to which, the typology of the portico and the porticoed urban thoroughfare, was alien to its urban history. Nevertheless, for the undersigned, both projects seem convincing in this choice, as does the decision to resort, for the town hall, to the historical typology of the "*broletto*", or mercantile loggia, open on all four sides, with an entirely porticoed ground floor and an upper floor free from intermediate pillars for a public council chamber/civic hall for exhibitions, conferences, shows (in reality, according to the canonical model of the *broletto*, both projects indulge in some poetic licence: the first by providing an entirely terraced roof for outdoor parties and events; the second by inserting an intermediate floor for offices and administrative functions between the restored porticoed base and the hall).

On the other hand, the two projects do differ in their individual compositional and language choices, in a different relationship between new and old: the first is more assonant, with a declared reference to a Muzio-like figuration; the second more marked and up-to-date, in a determination to clearly detach the old of the restored porticoed base with respect to the new in the volume above, and in the insertion of a "modern" medieval tower with explicit formal references, functioning not only as ascent staircase/fire escape, but also as a lookout point for observation of the town from above.

In conclusion, it is worth recalling the experimental nature of these analyses and projects, given the complexity of the issues involved in the theme of reconstruction recalled at the start of this essay. In particular, with respect to the justified distrust of many restoration specialists regarding the deceptive simplification of the formula "where it was, as it was", the doubt that the examples of reconstruction analysed (in particular Venzone, Teora, and Messina), which our own projects raise, as to whether this reserve applies equally to the edifices and monumental areas of the town as it does to the more basic buildings and the traditional housing fabric, or if the criteria and methods of an intervention should not be fittingly differentiated according to the specific remit of the architectural project.

And this in compliance with the belief, as has been said, that the reconstruction of a town or city is never a merely physical fact, of infrastructure, buildings, communal urban spaces, services, and greenery. Is not an exclusively urban and architectural work. But is the reconstruction of a community.

## Notes

<sup>1</sup> In the copious bibliography, for the different evaluations, see at least: Giuseppe Miano, *Il Piano Borzì*, in Giusi Currò, *La trama della ricostruzione. Messina dalla città dell'Ottocento alla ricostruzione dopo il sisma del 1908*, Gangemi, Rome 1991, pp. 47-61; Francesco Cardullo, *La ricostruzione di Messina 1909-1940: l'architettura dei servizi pubblici e la città*, Officina, Rome 1993; Francesco Cardullo, *Giuseppe e Alberto Samonà e la Metropoli dello Stretto di Messina*, Officina, Rome 2006; Francesco Cardullo, *La ricostruzione di Messina: tra piani, case e ingegneri*, in Vv.Aa., edited by Giuseppe Campione, *La furia di Poseidon. Messina 1908 e dintorni*, 2 vols., vol. 2, Silvana Editoriale, Cinisello Balsamo (MI) 2009, pp. 81-96; Nicola Aricò, *Ragionamento sulla città tradita*, idem, pp. 317-328; Francesco Indovina, *Messina: natura, guerra e speculazione*, idem, pp. 337-350.

On the general theme of reconstruction strategies, see the special monographic issue of the journal "Hinterland", nos. 5-6 from 1978, dedicated to natural disasters and reconstruction strategies, and the editorial by Guido Canella *Assumere l'emergenza che non finisce*, pp. 2-3.

<sup>2</sup> Amid the vast bibliography, for an overview, see at least: Eirene Sbriziolo de Felice, *Belice 1968. Decennale di un terremoto: promemoria per soli architetti?*, with the annexed *Schede* by Sergio Bracco, in "Hinterland", nos. 5-6, 1978, pp. 16-23; Agostino Renna, Antonio De Bonis, Giuseppe Gangemi, *Costruzione e progetto. La Valle del Belice*, Clup, Milan 1979; Luca Ortelli, *Architettura di muri. Il museo di Gibellina di Francesco Venezia*, in "Lotus International", no. 42, 1984, pp. 120-128; Marcella Aprile, Roberto Collovà, Teresa La Rocca, *Ricostruzione delle Case Di Stefano, Gibellina*, in "Domus", no. 718, 1990, pp. 33-43; Pierluigi Nicolini, *Una via porticata. Franco Purini e Laura Thermes a Gibellina*, in "Lotus International", no. 69, 1991, pp. 90-102; Giuseppe Marinoni, *Metamorfosi del centro urbano. Il caso di Gibellina*, idem, pp. 72-89; Alvaro Siza Vieira, Roberto Collovà, *Ricostruzione della Chiesa Madre e ridisegno della piazza Alicia e delle strade adiacenti, Salemi, Trapani*, in "Domus", no. 813, 1999; Alvaro Siza Vieira, Roberto Collovà, *Atti minimi nel tessuto storico, Salemi, 1991-1998*, in "Lotus International", 106, 2000, pp. 104-109; Marcella Aprile, *Il terremoto del Belice o del fraintendimento*, in Vv.Aa., edited by Giuseppe Campione, *La furia di Poseidon. Messina 1908 e dintorni*, 2 vols., vol. 2, Silvana Editoriale, Cinisello Balsamo (MI) 2009, pp. 221-234; Franco Purini, *Un'esperienza siciliana*, idem, pp. 235-240; Roberto Collovà, *Belice fermo immagine 2018. Le qualità resistenti della ricostruzione*, in Vv.Aa., *Ricostruzioni. Architettura, città, paesaggio nell'epoca delle distruzioni*, edited by Alberto Ferlenga and Nina Bassoli, Silvana Editoriale, Cinisello Balsamo (MI) 2018, pp. 77-82.

<sup>3</sup> Also in this case, among the very rich bibliography it is worth mentioning: Gianfranco Caniggia, Francesca Sartogo, *Ricerca storico-critica per la ricostruzione e il restauro del centro storico di Venzone*, ICOMOS-Consiglio Italiano, 1977-1979; Gianugo Polesello, *Friuli 1976. Riedificare per un contesto senza città*, with the annexed *Schede* by Giusa Marcialis and Pierluigi Grandinetti, in "Hinterland", nos. 5-6, 1978, pp. 42-55; Luciano Semerani, *Vajont 1963. Ricostruzione senza rinascita*, with the annexed *Schede* and an interview *Longarone: un sindaco quindici anni dopo*, in "Hinterland", nos. 5-6, 1978, pp. 4-15; Paolo Marconi, *Restauro e conservazione: com'era, dov'era?*, in "Zodiac", no. 19, 1998, pp. 40-55; Francesca Sartogo, *Udine e Venzone. Lettura critica per una storia operante del territorio friulano*, Alinea, Florence 2008; Alessandro Camiz, *Venzone, una città ricostruita (quasi) "dov'era, com'era"*, in "Paesaggio Urbano", no. 5/6, 2012, pp. 18-25; Alessandro Camiz, *New towns o ricostruzione (quasi) "dov'era, com'era"? L'esempio del progetto per Venzone*, in "Urbanistica Dossier", no. 005, 2013, pp. 85-89; Marisa Dalai Emiliani, *Venzone "com'era e dov'era": da eresia a modello*, in Corrado Azzollini, Giovanni Carbonara (eds.), *Ricostruire la memoria. Il patrimonio culturale del Friuli a quarant'anni dal terremoto*, Forum Editrice Universitaria Udinese, Udine 2016, pp. 85-93; Remo Cacitti, Francesco Doglioni, *Il Duomo di Venzone*, idem, pp. 104-115; Corrado Azzollini, Antonio Giusa (eds.), *Memorie. Arte, immagini e parole del terremoto in Friuli*, catalogue of an exhibition at Villa Manin, Azienda Speciale Villa Manin – Skira editore, Milan 2016; Francesco Doglioni, *Friuli 1976. Venzone com'era e dov'era*, in Vv.Aa., *Ricostruzioni. Architettura, città, paesaggio nell'epoca delle distruzioni*, edited by Alberto Ferlenga and Nina Bassoli, Silvana Editoriale, Cinisello Balsamo, Milan 2018, pp. 83-91. With regard to the question of the "historical fake", see the

numerous interventions by Marco Dezzi Bardeschi, where the combination of “where it was, as it was” announces a “naive self-deception”, a “captivating misunderstanding”, a “big hoax that dies hard”, aimed at soothing behind an “analogical scenographic reconstruction “the dramatic trauma of a population struck in its centuries-old places of life and affection”, in Marco Dezzi Bardeschi, *L'ora della prevenzione*, in “Ananke”, no. 79, September 2016, pp. 3-4. On the same topics, see also the previous issues of Dezzi's magazine, issues no. 42, June 2004, and no. 3, December 1993, with numerous interventions by Dezzi himself and by such important scholars as Giovanni Carbonara, Roberto Cecchi, Luigia Binda, Stefano Della Torre, Carolina Di Biase, Antonio Acuto, and others.

<sup>4</sup> See: Giovanni Pietro Nimis, *La ricostruzione possibile. La ricostruzione nel centro storico di Gemona del Friuli dopo il terremoto del 1976*, with a preface by Francesco Tentori, Marsilio, Venice 1988; Giovanni Pietro Nimis, *Terre mobili. Dal Belice al Friuli, dall'Umbria all'Abruzzo*, Donzelli, Rome 2009; Luciano Semerani, *Architetture*, in *Composizione, progettazione, costruzione*, edited by Enrico Bordogna, Laterza, Bari 1999, pp. 59-105.

<sup>5</sup> Annarita Teodosio, *Oltre le macerie. Ricostruzione in Irpinia tra antichi luoghi e nuovi spazi*, in “Urbanistica Dossier”, no. 005, 2013, pp. 98-101; Filippo Orsini, *Irpinia 1980. Un terremoto dimenticato*, in Vv.Aa., *Ricostruzioni. Architettura, città, paesaggio nell'epoca delle distruzioni*, edited by Alberto Ferlenga and Nina Bassoli, Silvana Editoriale, Cinisello Balsamo (MI) 2018, pp. 92-97.

<sup>6</sup> Among the various essays by Giorgio Grassi and Agostino Renna on the topic, see in particular: Giorgio Grassi, Agostino Renna, *Piano di recupero del centro storico di Teora (Avellino), 1981*, in Giorgio Grassi, *I progetti, le opere e gli scritti*, Electa, Milan 1996, pp. 128-141. See also Riccardo Campagnola, *Ri-comporre l'infranto: figure di rifondazione. Tesi e ipotesi sul Progetto di ricostruzione del centro storico di Teora (Avellino) di Giorgio Grassi*, in M.G. Eccheli, A. Pireddu (ed.), *Oltre l'Apocalisse*, Firenze University Press, Florence 2016, pp. 24-39.

<sup>7</sup> For L'Aquila, see: *L'Aquila. Il Progetto C.A.S.E., Complessi Antisismici Sostenibili ed Ecocompatibili. Un progetto di ricostruzione unico al mondo che ha consentito di dare alloggio a quindicimila persone in soli nove mesi*, a creation of Gian Michele Calvi, edited by Roberto Turino, IUSS, Pavia 2010. For Emilia Romagna, see: Matteo Agnoletto, *Emilia 2012. La fine di una storia*, in Vv.Aa., *Ricostruzioni. Architettura, città, paesaggio nell'epoca delle distruzioni*, edited by Alberto Ferlenga and Nina Bassoli, Silvana Editoriale, Cinisello Balsamo, Milan 2018, pp. 128-129; Massimo Ferrari, *Emilia 2012. Territorio sovrainciso*, idem, pp.123-127.

<sup>8</sup> According to ISTAT surveys on 31 December of the years 2010, 2016, 2019, the resident population in the three municipalities in question was: Amatrice 2717, 2532, 2358; Norcia 4995, 4981, 4724; Camerino 7130, 7007, 6692.

<sup>9</sup> See Giovanni Carbonara, Conference: *La ricostruzione e l'identità dei luoghi*, as a part of the study course *Beni culturali ed emergenza* of the National council of Architects, Planners, Landscape Architects and Conservators, held at the CNAPPC HQ in Rome on 24 January 2020.

<sup>10</sup> On the urban history of Amatrice, among the extensive bibliography, see: Giovanni Carbonara, *Gli insediamenti degli ordini mendicanti in Sabina*, in *Lo spazio dell'umiltà*, Atti del Convegno, Fara Sabina 1984; Marina Righetti Tosti-Croce (ed.), *La Sabina Medievale*, Amilcare Pizzi, Cassa di Risparmio di Rieti, Rieti 1985; Enrico Guidoni, *L'espansione urbanistica di Rieti nel XIII secolo e le città di nuova fondazione angioina*, in *La Sabina Medievale*, op. cit.; Luigi Aquilini, *Carlo V, Alessandro Vitelli, il Feudo di Amatrice*, S.E., Milan 1999; Luigi Aquilini, Carlo Blasetti, *Amatrice: dagli angioini agli aragonesi. Monografia storico-araldica di un antico comune*, Anibaldi Grafiche, Ancona 2004; Romeo Giammarini, *L'impianto urbano della città di Amatrice. Geometrie, adattamenti e trasformazioni secc. XIII-XV*, in “Storia dell'Urbanistica”, no. 9/2017, *Centri di fondazione e insediamenti urbani nel Lazio (XII-XX secolo): da Amatrice a Colferro*, Edizioni Kappa, Rome 2017; Anna Imponente, Rossana Torlontano, *Amatrice. Forme e immagini del territorio*, Electa, Milan 2015; Alessandro Viscogliosi, *Amatrice. Storia, arte, cultura*, Fondazione Dino ed Ernesta Santarelli, Silvana Editoriale, Cinisello Balsamo (MI) 2016. For San Giovanni Valdarno and the Florentine New Lands, see Edoardo Detti, Gian Franco Di Pietro, Giovanni Fanelli, *Città murate e sviluppo contemporaneo*, Edizioni CISCU, Lucca 1968.

<sup>11</sup> See the Inspection Report of the Technical Verification Group of the Civil Defence and

Municipality of Amatrice of March 2019, which includes differentiated operations: dismantling and cataloguing of certain monumental buildings; securing the few buildings with limited damage; demolition and removal of the rubble of the remaining built fabric.

<sup>12</sup> See: Architectural Design Workshop, two-year Master's Degree in the "Architecture and Urban Design" [*Architettura e Disegno Urbano*] study course, Polytechnic University of Milan, supervisors Enrico Bordogna, Tommaso Brighenti, AY 2016-17, 2017-18, 2018-19, 2019-20. During these years, in addition to the annual or six-monthly exams, various degree theses concerning Amatrice, Norcia, Camerino were produced. In October 2017, a first inspection was carried out on the occasion of participation as speakers at the 1997-2017 Conference. *Strategie per la ricostruzione post-sisma*, edited by Luigi Coccia and Marco D'Annunziis, School of Architecture and Design, University of Camerino, Ascoli Piceno, 26 October 2017. A second inspection was carried out on 5-7 May 2019.

<sup>13</sup> See: Enrico Bordogna, Tommaso Brighenti, *Progetto di ricostruzione del centro di Amatrice: com'era, dov'era?*, in collaboration with A. Bonardi, A. Valvason; students L. Martellini, N. Mawed, M. Polvani, G. Rosso, presented at the 17<sup>th</sup> Convention *Identità dell'architettura italiana*, Florence, 11-12 December 2019; Andrea Bonardi, Andrea Valvason, *Il nucleo antico di Amatrice: dov'era, com'era?*, Degree Thesis at the Polytechnic University of Milan, June 2020 (supervisors E. Bordogna, T. Brighenti).

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Tommaso Brighenti  
**Reconstruction and rebirth strategies in post-earthquake Central Italy: Amatrice, Norcia, Camerino**

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Abstract

The works of architecture presented here, the subject of teaching and research work carried out with students during an Architectural Design Workshop at the Polytechnic University of Milan, show various interventions and projects for the reconstruction of some of the municipalities in Central Italy laid waste by the summer-autumn earthquakes of 2016: specifically, the Municipalities of Amatrice, Norcia, and Camerino. Through these projects, various reconstruction strategies were verified, differentiated according to the specific settlement, historical and structural characteristics, in order to pinpoint distinct lines of intervention consistent with the recognizable and recoverable potential of each individual context.

Keywords

Earthquake — Reconstruction — Amatrice — Norcia — Camerino



**Fig. 1**

Amatrice: photograph taken during the first inspection on October 26, 2017 of the rubble next to the complex designed by Arnaldo Foschini. Photo by M. Frisinghelli.

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In line with a long case history of earthquakes in Italy (Messina 1908; Belice 1968; Friuli 1976; L'Aquila 2009; Romagna 2012), also the earthquake which struck the territories of Central Italy in the summer-autumn of 2016 caused damage on many different fronts: to monuments, the urban residential fabric, scattered private buildings, production facilities, education and service systems, the infrastructure system, and the road access networks.

In all of these sectors, beyond the non-negligible and indispensable distinction between the moment of the emergency, to be tackled with immediate reversible interventions, and that of reconstruction, which, on the contrary, requires structural and prospectively stable interventions aimed at restoring and relaunching the form and life of the towns and territories affected, the reconstruction strategy can be, and often has been, addressed not only «in terms of pure reparation, but also with virtual intentions of innovation and a relaunch that differs according to the situation» (Canella 1978)<sup>1</sup>, in line with a targeted strategy which, once again, differs on a case-by-case, context-by-context basis.

In regard to the earthquake in Central Italy of 2016, and restricting the field to the municipalities of Norcia, Amatrice and Camerino, the diagnostic analyses and the reconstruction strategies were necessarily different. By means of various projects, and a dialectic interaction on the various realities, we tried out different reconstruction strategies that could develop new driving forces, distinguished according to the specific settlement, historical and structural characteristics of the contexts in question, and fittingly identifying multiple intervention strategies.

If, in Amatrice<sup>2</sup>, drastically affected by the earthquake, so much so that



**Fig. 2**

Amatrice: “Il nucleo antico di Amatrice: dov’era, com’era?”. Planimetry. (Thesis by: L. Bonardi, A. Valvason; Supervisors E. Bordogna, T. Brighenti, June 2020; Politecnico di Milano).

practically nothing remains of the ancient nucleus, the reconstruction of the outlying areas can only proceed properly by taking into account certain significant pre-existing buildings such as the civic complex built by Arnaldo Foschini, the most urgent complaint seems to be that of the integral reconstitution of the historical nucleus and of all those civic and residence services located in the Old Town; in Norcia<sup>3</sup>, apart from the monumental buildings in the centre for which a philological restoration is conceivable, the most urgent sector for reactivation and relaunch seems to be that of the widespread fabric of small production and commercial units linked to the agri-food sector, together with elementary and secondary education facilities, hard hit by the earthquake; in Camerino<sup>4</sup> it seems that a possible intervention cannot ignore the historic university and cultural structures present, while addressing the recovery, safeguarding and restoration of works of art affected by the earthquake, also in consideration of the presence of some courses linked to the local cultural heritage and the historic University.

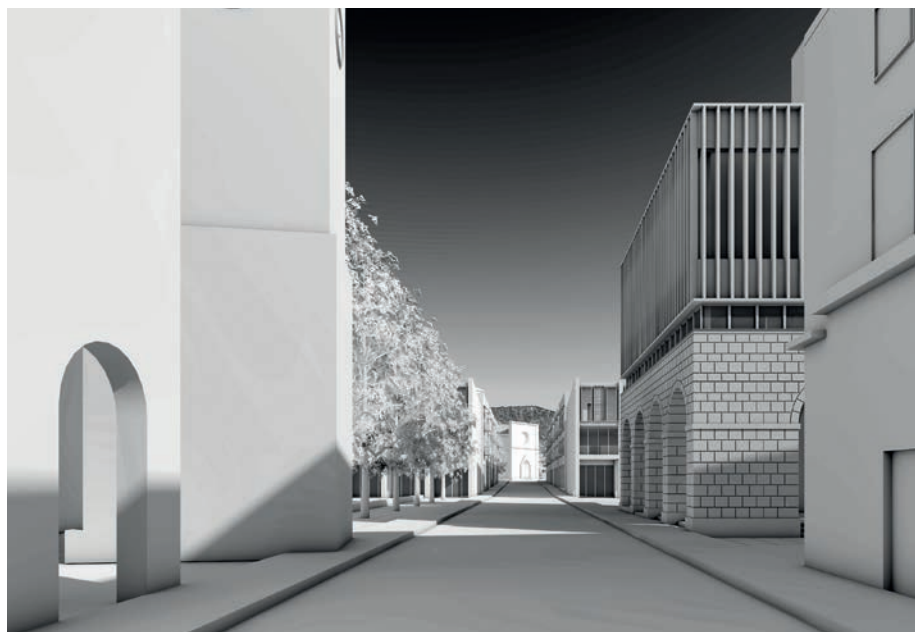
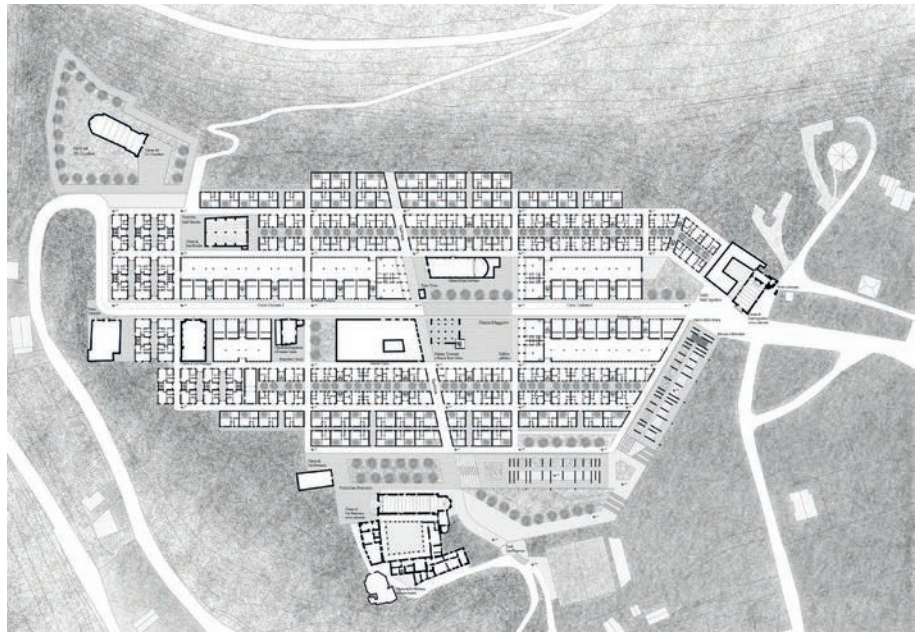
*The historical nucleus of Amatrice: where it was, as it was?*<sup>25</sup>

Among the municipalities affected by the 2016 earthquake in Central Italy, Amatrice is patently among the most severely damaged, a fact which has triggered a heated debate over the reconstruction strategy to be adopted (Fig. 1). Any intervention on the ancient nucleus will be extremely complex, given the condition of a genuine clean slate, with the almost complete elimination of the built fabric but the same original morphology as the ancient pre-earthquake centre. Currently, only the central road axis remains recognizable, which structured this typical ridge settlement diagonally from gate to gate, west to east.

In this context, the strategy adopted aims at confirming the perimeter area of the ancient nucleus by way of a morphological layout faithful to the original settlement, with a longitudinal conformation arranged on a northwest-southeast axis, and a road network based on an orthogonal grid with a straight main axis and two crossroads. The pattern of the blocks is re-proposed to conform with the existing fabric through «a system inscribed within an almost rectangular perimeter, according to characteristics not dissimilar to the tradition of the Florentine “New

**Figg. 3 a-b-c**

Amatrice: "Il nucleo antico di Amatrice: dov'era, com'era?". Ground floor plan of the reconstruction project of the historic core; view from Corso Umberto I of the central square with the view of the new broletto and the new civic tower; reverse view from Corso Umberto I del Broletto with the church of Sant'Agostino in the background. (Thesis by: L. Bonardi, A. Valvason; Supervisors E. Bordogna, T. Brighenti, June 2020; Politecnico di Milano).





**Figg. 4 a-b-c-d**

Amatrice: “Il nucleo antico di Amatrice: dov’era, com’era?”. Axonometric cross-sections of the typical blocks of the reconstruction project of the historic core. (Thesis by: L. Bonardi, A. Valvason; Supervisors E. Bordogna, T. Brighenti, June 2020; Politecnico di Milano).

Lands” (see the example of Arnolfo di Cambio’s San Giovanni Valdarno) or to contemporary “foundation cities” in the French Midi». (Bordogna 2019)<sup>6</sup> (Figs. 2-3a).

With this project, we wished to investigate two intervention themes developed on an architectural scale.

The theme of the first project concerned certain civic structures and the configuration of a series of public spaces. In particular, in a central position with respect to the urban grid thus defined, the project envisages a partially porticoed square, located on the northern side of the main axis, the current Corso Umberto I, and proposes a complete reconstruction of the Church of San Giovanni along with the conservation and valorization of the Civic Tower, which is among the few buildings not destroyed by the earthquake. On the opposite side of the street, is the Palazzo del Comune – the Town Hall, a building which adopts the typological tradition of the *broletto* or mercantile loggia, porticoed on all side on the ground floor to recover and reconstruct the original base dating back to the medieval period; on the floors above are office spaces, available to the Municipality of Amatrice, and a large council room/civic hall for exhibitions, conferences, and recreational events. The various floors are accessible thanks to a tower located at one of the corners of the volume, envisaged as a new civic tower, a figurative and symbolic element which recalls the turreted appearance of the medieval town as well as becoming a symbol of the reconstruction (Figs. 3b-c).

The second theme concerns the residential fabric, with three blocks to be flexibly adopted in the reconstruction process as needed: this block type becomes two further variants depending on whether it is standing on the main street (with three storeys above ground) or on the side streets (two storeys above ground) structured internally with a central stairwell which gives access to two apartments per floor which overlook the street (Fig. 4 a-b); a terraced type (with one or two storeys) which has a configuration of two buildings separated longitudinally by an internal garden (Fig. 4c); or a patio type, a single-storey suitable for the outermost blocks of the town, consisting in a series of dwelling units characterized by an internal roadway and views mainly of the internal patio (Fig. 4d).

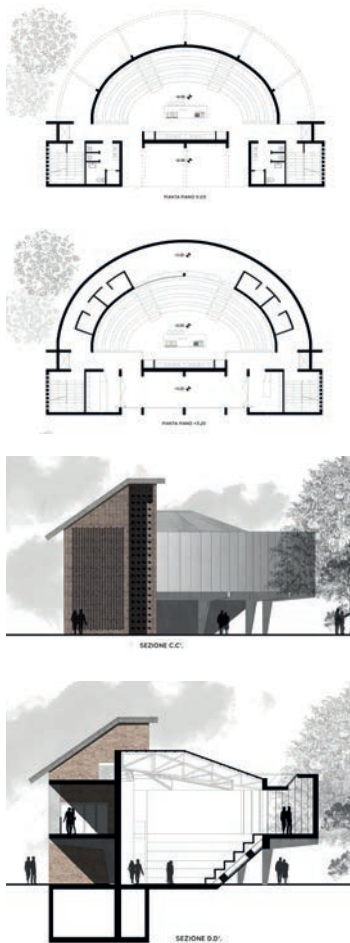
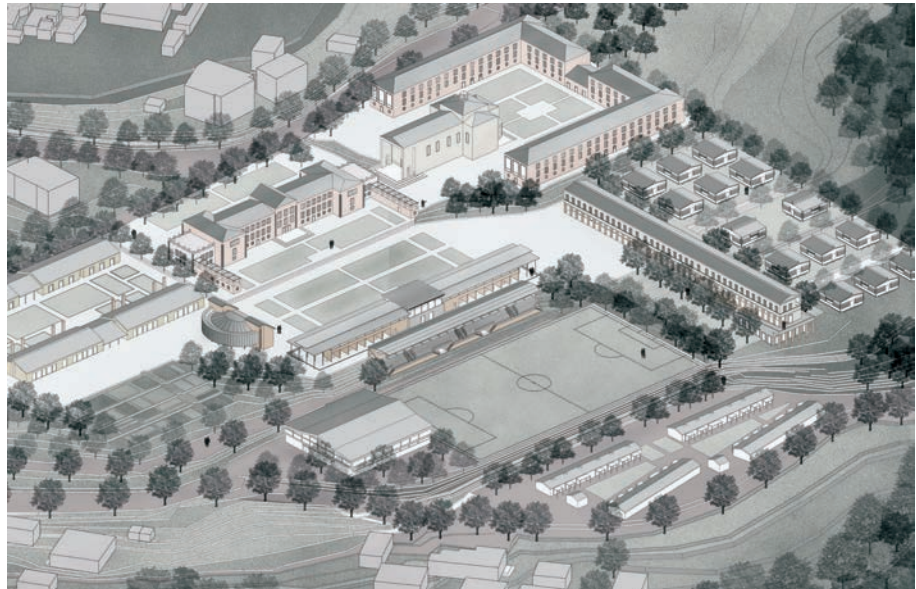
#### *Hotelier Institute and Cooking School for a New Urban Centrality at Amatrice<sup>7</sup>*

In a second hypothesis presented here, it was decided to work on the suburbs. On the same axis heading south-east just outside the centre, we can still find, entirely recognizable despite the substantial damage suffered, an urban area created by Arnaldo Foschini<sup>8</sup> between the 1930s and ’60s, a unitary complex with an orphanage, hospice, and separate church, of a clear morphological definition and a sober expressive quality, to which was subsequently added lower down, on an orography characterized by significant changes in height, a series of sports facilities (a football pitch and an indoor gym) (Figs. 5 a-b-c).

Instead, between the Old Town and Foschini’s complex, the buildings of an elementary school and a hotel school which was important for the economy of Amatrice were razed to the ground. The hotel school, which was attended by around one hundred and thirty students, mostly from outside the town and the province, was temporarily transferred to Rieti after the earthquake. In the same way, in a contiguous area, four simple pavilions arranged in parallel, with one storey above ground, forming a partially disused barracks, were totally destroyed. In this scenario, by re-

**Fig. 5 a-b-c**

Amatrice: reconstruction project of the extra moenia area near the buildings designed by Arnaldo Foschini. General front view; View proposal axonometry; Drawings of the “anatomical theater”: plans, elevation and section. (Students: V. Boffo, L. Bongiolatti, A. Bugatti, A. Giamboni, C. Landoni, A. Sposetti; Prof. E. Bordogna, T. Brighenti; AY 2016-17 and 2017-18; Politecnico di Milano).



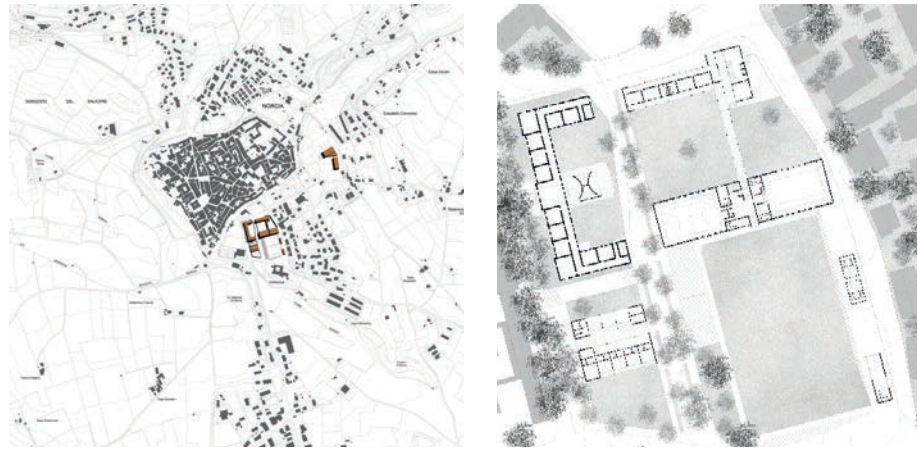
sorting to certain Muratori-style antecedents, in particular the square of the Cortoghiana workers' centre in the mining district of south-west Sardinia, the project has focused on configuring a new urban centrality, arranging, in correspondence with Foschini's buildings now restored and given new destinations (a municipal seat in the former orphanage, healthcare services and special residences for the elderly, students, and young couples in the former hospice), two orthogonal squares arranged as an “L”, with, on the one side, an in-line block with two and three storeys for council housing overlooking the piazza which slopes downwards, featuring a portico on the ground floor and continuous eaves, and, on the opposite side, near the area of the former barracks, the hotel and cookery school, as an ideal extension and completion of Foschini's scheme. Meanwhile, on the lower side overlooking the former orphanage, there is a double in-line block for commercial use, and below it a stand and changing rooms for the existing sports field.

The cookery school re-proposes the plan of the former barracks pavilions, with teaching spaces and external roofed environments for services and a restaurant. Then, for the specific needs of a cookery school a new building has been inserted, in front of Foschini's church but separate from it, with a central plan which incorporates the evocative typology of the anatomy theatre, here reconverted for culinary education (Fig. 5c).

*Norcia: a campus for basic education and sports facilities as a part of the town*<sup>9</sup>

At the end of 2016, around 800 students of the Municipality of Norcia, from nursery to secondary school levels, found themselves deprived of the opportunity to take advantage of their school buildings which had been destroyed or seriously damaged by the earthquakes. In addition, the seism had above all damaged the widespread fabric of small production and commercial units linked to the agri-food sector which characterized and supported a large part of the local economy.

The existing school system had a layout that was markedly bipolar: one



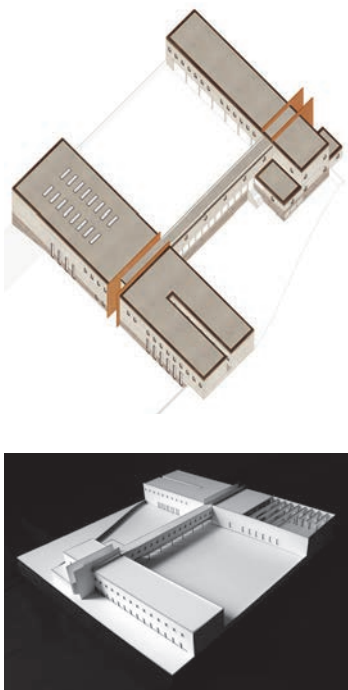
**Figg. 6 a-b-c-d**

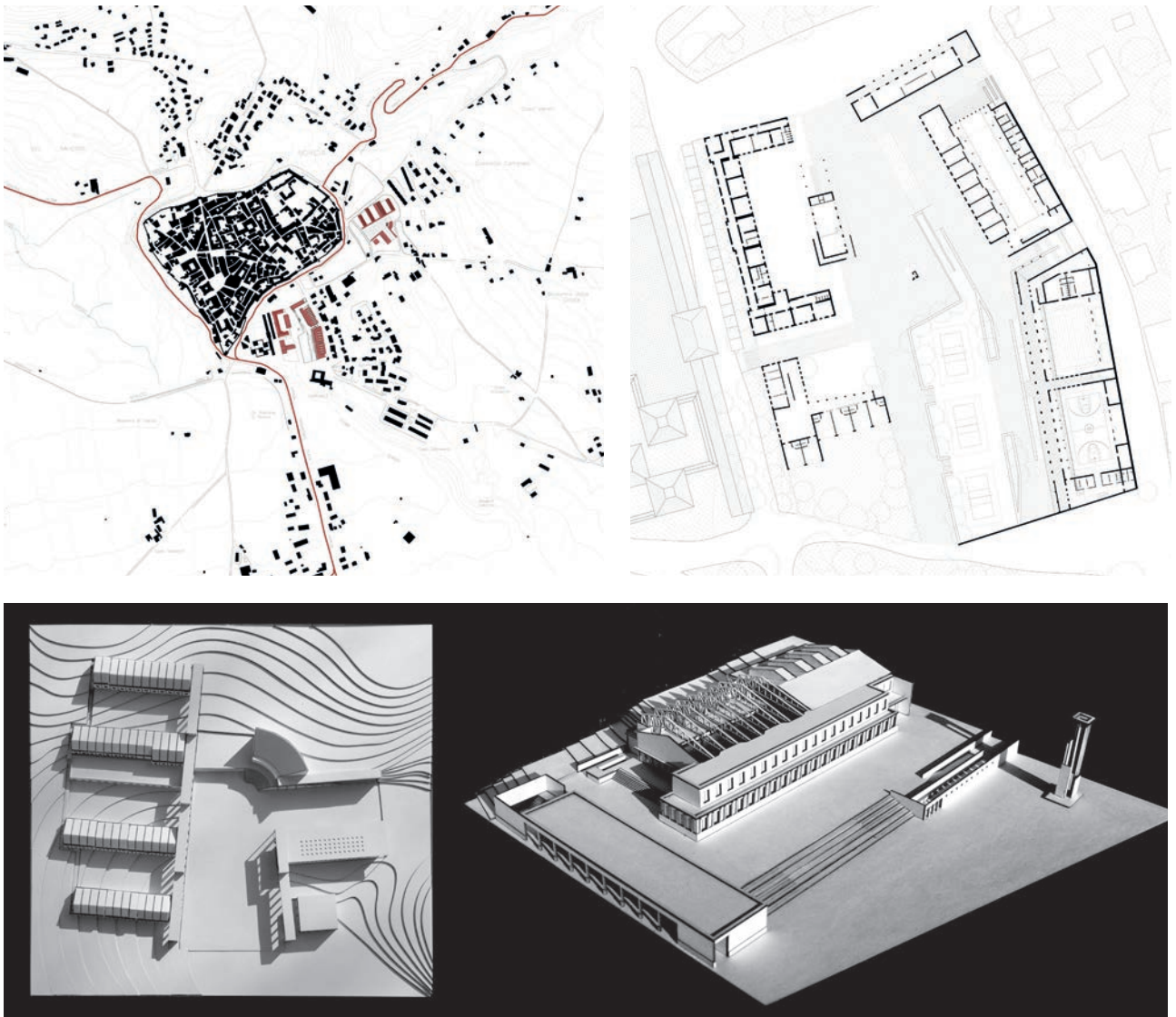
Norcia: Primary School. General plan; Ground floor plan; Axonometry; Physical Model. (Students: S. Angeli, S. Angrilli; Prof. E. Bordogna, T. Brighenti; AY 2018-19; Politecnico di Milano).

school complex located immediately beneath the ancient town walls, just outside the main gate allowing access from the territory to the Old Town, given over to an elementary school, a junior secondary, and a comprehensive series of sports facilities; a second complex, further north, in a vale just outside the walls, entirely dedicated to secondary education<sup>10</sup>. All in all, a small, well-organized “campus for education and sport”, probably built up over time without an explicit original design, but of indisputable quality and with its own identity, which the 2016 earthquake seriously maimed but did not completely destroy, although it did leave the elementary and junior secondary school buildings unusable.

In this context, the project choice was to confirm, with greater strength and a wealth of facilities, the existing campus system to the right of the main entrance axis to the town. To this end, the elementary school building has been restored, its plan and measurements being taken as the generating element of the proposed morphology, while the junior secondary school building has been replaced since it was deemed no longer recoverable, like the small anonymous pavilions for the gym and related services. The two arms of the C-shaped elementary school building have been extended with two in-line blocks interconnected by a path covered by a portico, the latter also acting as a retaining wall while delimiting the internal open space by creating a court partially left green, more reserved but intentionally permeable, so as to also function as a small urban square. Within this court, a small outdoor wooden theatre can accommodate dramatic and musical performances by the students, and other activities and events of the entire school complex as well as the community. Inside the larger in-line structure is a gym and a swimming pool, while in the narrower structure two storeys above ground house the junior secondary school. On the side of the C-shaped building facing south, lying along the internal pedestrian axis which crosses the whole of the campus, is a small infant school including a nursery school and a crèche, with a square ground plan arranged around a small courtyard overlooked by the classrooms, and communal outdoor spaces where the children can play (Figs. 6 a-b-c-d).

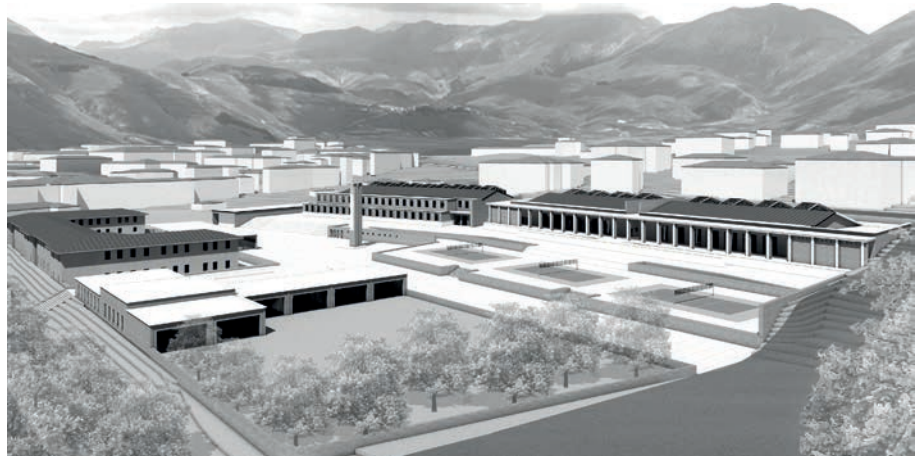
A possible variant of the project indulges in greater freedom than the existing situation, confirming the elementary school building but introducing above it an entrance plaza of an urban value, rhomboidal in shape, surrounded by three new buildings for the nursery school, junior secondary school, and gym, in turn the object of more accentuated typological and expressive research. The sports facilities too, occupying part of the football field area moved not far away, are further consolidated, with





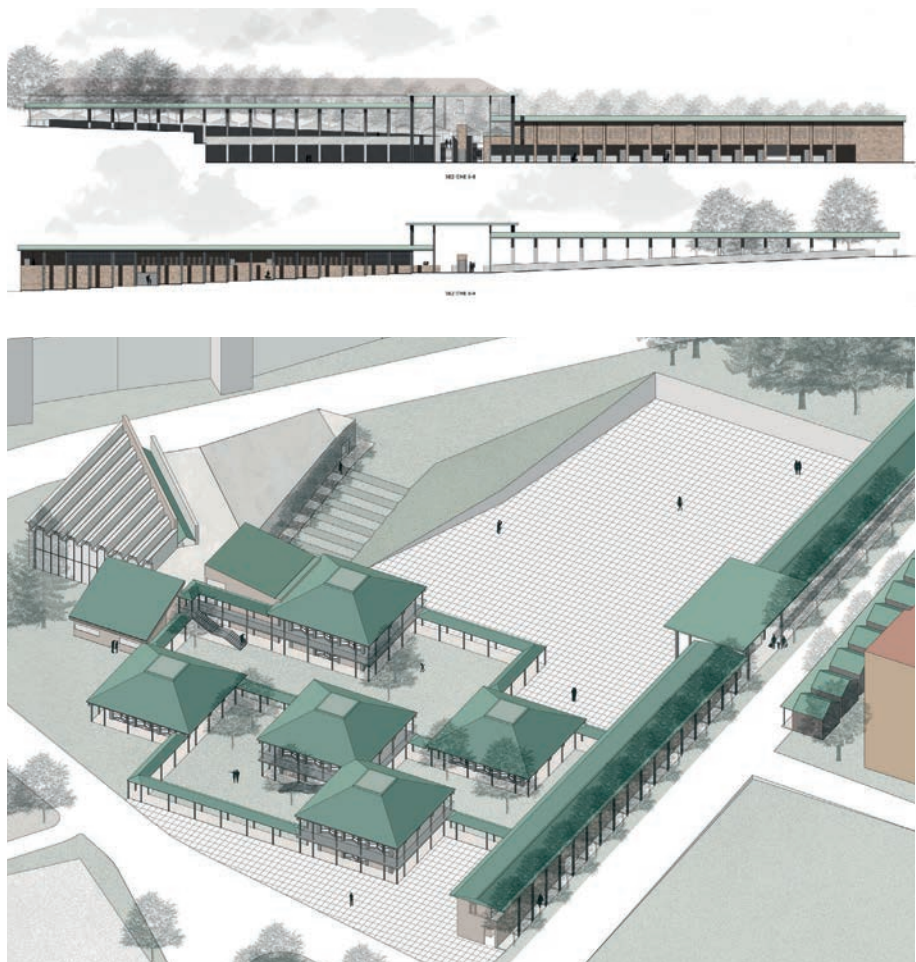
**Fig. 7 a-b-c-d**

Norcia: school complex for Primary School. Volumetric plan; Ground floor plan; Model of the school complex to the north and model of the school complex along the route of access; View of the school complex from the valley. (Students: M. Colombo, P. Escoriza, M. Iotti; Prof. E. Bordogna, T. Brighenti; AY 2018-19; Politecnico di Milano).



**Fig. 8 a-b-c**

Norcia: Exhibition center and street market. Street market elevations prospects; Axonometric view of the exhibition halls and market; Volumetric plan. (Students: V. Boffo, L. Bongiolatti, A. Bugatti, A. Giamboni, C. Landoni, A. Sposetti; Prof. E. Bordogna, T. Brighenti; AY 2016-17 and 2017-18; Politecnico di Milano).



more substantial indoor and outdoor amenities (gym, swimming pool, basketball, volleyball, and tennis courts), with a stand, locker rooms, and other service areas for the public (Figs. 7 a-b-c-d). In this sense, in both of the solutions that confirm the campus system, by using the sloping orography of the land, the design approach, rather than deepening the internal typological structure of the different school buildings, aims to configure a part of the town specifically intended for functions of education, sports and leisure activities. A fusion therefore takes place, beyond the historical direction of access from the territory, with the proposal of an intervention intended for a Trade Fair quarter and an in-line block facing the street across from the elementary school, intended for shops and market facilities for the traditional agri-food production of the territory located along the industrial expansion line and characterized by a series of fixed stalls for permanent shops and an open covered space, with a more spontaneous and flexible conformation suitable for fairs, exhibitions, and civic festivals.

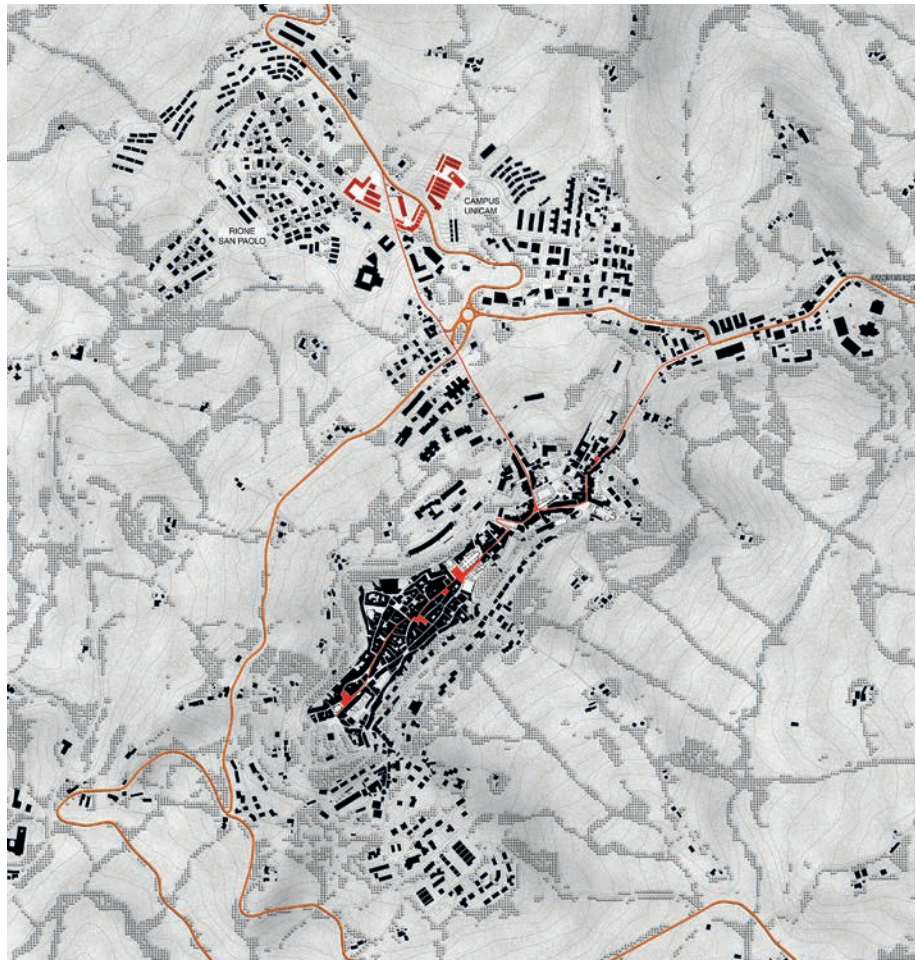
The exhibition centre with adjoining auditorium is arranged on a grid in which a series of small pavilions with a wooden structure and a four-gable roof are located, connected to one another by covered walkways which end near the auditorium consisting of two large orthogonal halls (one flat and the other terraced) which in part compensate for the difference in height of the area (Figs. 8 a-b-c).

*Camerino: recovery, safeguarding and restoration of works of art affected by the earthquake<sup>11</sup>*

In Camerino, the intervention strategy began from the issue of the uni-

**Fig. 9**

Camerino: center for the recovery, shelter and restoration of works of art affected by the earthquake. Planimetry. (Thesis by: S. Faravelli and M. Frisinghelli; Supervisors: E. Bordogna, T. Brighenti, AY 2017/18; Politecnico di Milano).



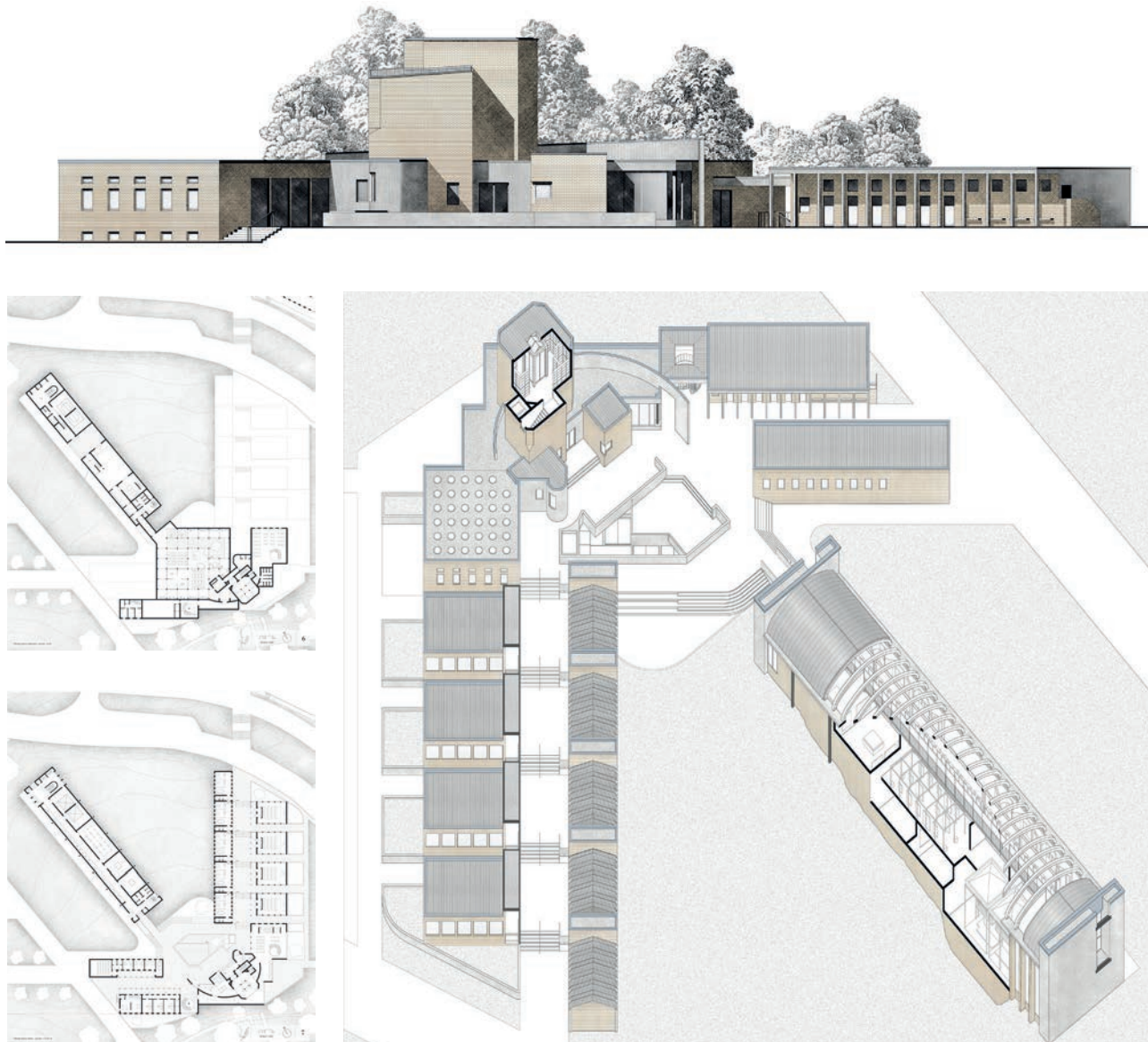
versity, a multi-centennial pole of urban and cultural transformation of the history and tradition of this municipality in the Marche, addressing a particular theme linked to the need to recover, safeguard and restore the works of art damaged by the earthquake, also in view of the presence of a course of study in Cultural Heritage with which to establish useful synergies of mutual exchange, involving students in workshop and internship activities aimed at the restoration of works of art or research into local art. This resulted in an original typology, conditioned on the one hand by the particular characteristics of the context, and on the other designed to meet educational and museum/workshop needs.

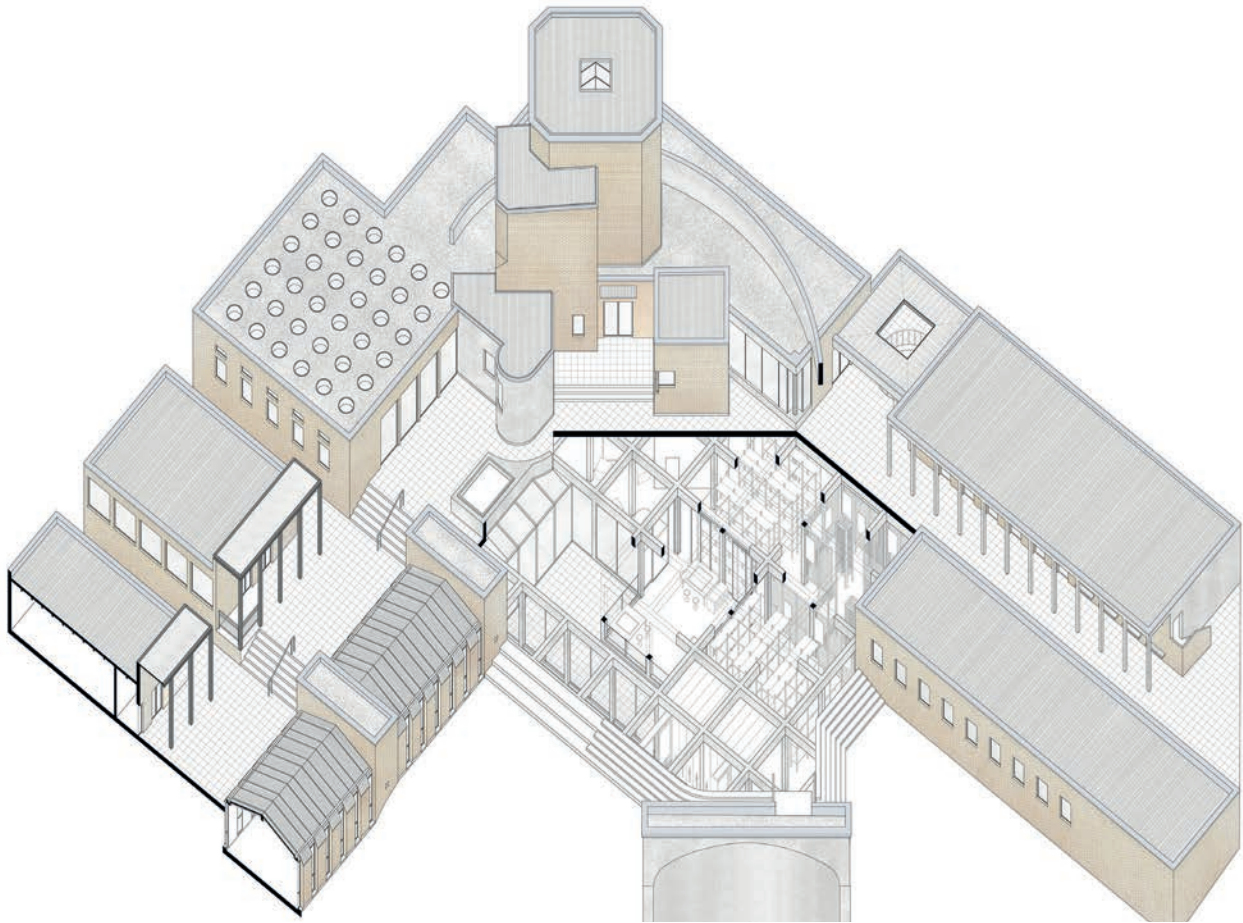
The choice was taken to intervene outside the Old Town, today only partially accessible, consolidating with the new addition, a complex consisting of buildings for a university residence and a departmental library created at the beginning of the 2000s by the architect Raffaele Mennella (Fig. 9).

The project site is located at the end of Via Madonna delle Carceri, in the north of Camerino. This trajectory arises inside the Old Town from the main street that runs through Camerino and which, near the museum complex of San Domenico, splits into two to define the main axes of the town's suburbs. Past the university science centre, the Church of Madonna delle Carceri, and the new commercial area, the trapezoidal-shaped intervention area is strategically placed at the end of a sequence of artefacts located on this trajectory lying on a gently steep slope. Along this axis of expansion, characterized by a series of university buildings positioned outside the historical nucleus, the project envisages three in-line blocks laid out as a trident, which ascend some curves following

**Fig. 10 a-b-c-d**

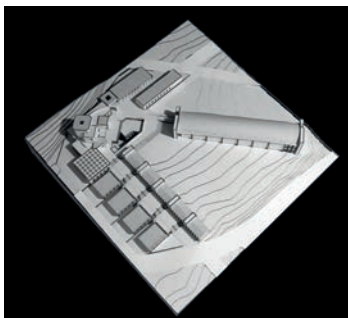
Camerino: center for the recovery, shelter and restoration of works of art affected by the earthquake. Elevation; Basement floor plan; Ground floor plan; General axonometry. (Thesis by: S. Faravelli and M. Frisinghelli; Supervisors: E. Bordogna, T. Brighenti; AY 2017/18; Politecnico di Milano).





**Fig. 11 a-b**

Camerino: center for the recovery, shelter and restoration of works of art affected by the earthquake. Axonometric cross section; Model (Thesis by: S. Faravelli and M. Frisinghelli; Supervisors: E. Bordogna, T. Brighenti; AY 2017/18; Politecnico di Milano).



the hilly terrain in continuity with the pre-existing university residences. The enclosed green areas that link the various parts of the intervention in a system of public and collective spaces, designed to enhance the characteristics of the site, overlook the extraordinary landscape of the Esino Valley, towards the Primo and San Vicino mountains.

The three buildings have separate destinations. The first wing houses standard university functions: teaching, research, and students' workspaces; the central wing is given over specifically to a museum, with rooms for storage, restoration workshops, and exhibition spaces for works salvaged from the territory; the third wing, of smaller dimensions and facing towards the recently constructed shopping mall, houses the service structures, with spaces for local associations, offices, a projection room, and a hostel (Figs. 10 a-b-c-d).

The three in-line buildings converge in a sort of slab which is multifaceted in both plan and elevation, and whose basement is intended as a deposit for works of art awaiting restoration, while the roof is a public square at the service of the entire complex. At the top of the slab and the three wings, the formal junction of the entire project, a block which develops in height from the composite volume contains a small, specialized library and complementary service spaces, configuring an organically concluded intervention which is barycentric to the existing university structures (Figs. 11 a-b).

## Notes

<sup>1</sup> For more information on this topic, see the essay and the rest of the issue: G. Canella, *Assumere l'emergenza che non finisce*, in "Hinterland", Year 1, nos. 5-6 / *Calamità naturali e strategie di ricostruzione* (special monographic issue), Milan, September-December 1978, pp. 2-3.

<sup>2</sup> Among the extensive bibliography on Amatrice, see as a minimum: A. G. Giavarina, E. Guidoni, *L'espansione urbanistica di Rieti nel XIII secolo e le città nuove di fondazione Angioina*, in M. Righetti Tosti-Croce (ed.), *La Sabina Medievale*, A. Pizzi Editore, Cassa di Risparmio di Rieti, Rieti 1985, pp. 166-187; E. Guidoni, *Storia dell'Urbanistica. Il Duecento*, Laterza, Bari 1989; A. Viscogliosi (ed.), *Amatrice, storia arte e cultura*, Silvana Editoriale, Cinisello Balsamo, Milan, 2016; E. Moriconi (ed.), *La storia di Amatrice. Dalla preistoria ai giorni nostri*, Typimedia editore, Rome, 2020.

<sup>3</sup> Among the extensive bibliography on Norcia, see as a minimum: A. Fabbi, *Breve storia di Norcia. Arte, storia, turismo*, Editrice San Benedetto, Norcia, 1975; U. Bistoni, F. Bozzi, *Norcia. Storia e storiografia di una città*, Volumnia, Perugia, 1983; M. T. Gigliozzi, *Norcia città sismica. La basilica di San Benedetto paradigma di rinascite*, Campisano Editore, Rome, 2019.

<sup>4</sup> Among the extensive bibliography on Camerino, see as a minimum: Vv.Aa., *Camerino. Ambiente, Storia, Arte*, G. Misici-Falzi Editore, Camerino, 1976; P. Verdarelli (ed.), *Camerino suo stato e ducato*, University of Camerino, Camerino, 1994; Lorenzo Ciccarelli, *Guida all'architettura nelle Marche: 1900-2015*, Quodlibet, Macerata, 2016.

<sup>5</sup> The project presented is taken from a thesis by A. Valvason and L. Bonardi of the Master's Degree Course in Architecture and Urban Design of the Polytechnic University of Milan discussed in the 2018-19 academic year. Supervisors: Profs. E. Bordogna, T. Brighenti.

<sup>6</sup> E. Bordogna, *Progetto di ricostruzione del centro di Amatrice*, in P. Zermani (ed.), *Identità dell'architettura italiana n. 17*, Diabasis, Parma, 2019, pp. 38-39. See also the volume: E. Detti, G. F. Di Pietro, G. Fanelli, *Città murate e sviluppo contemporaneo*, Edizioni CISCU, Lucca 1968.

<sup>7</sup> The projects presented were developed within a Master's Degree Course of the School of Architecture Urban Planning Construction Engineering at the Polytechnic University of Milan, in an Architectural Design Workshop held during the AY 2016-17 and 2017-18. Profs. E. Bordogna, T. Brighenti, V.M. Finzi (Plants and systems), M. Madeddu (Structures); Students: V. Boffo, L. Bongiolatti, A. Bugatti, S. Faravelli, M. Frisinghelli, A. Giamboni, C. Landoni, A. Sposetti.

<sup>8</sup> In the early Twenties, Arnaldo Foschini created one of his first works for Amatrice, the Institute for War Orphans, built between 1921 and 1923 for the Opera Nazionale per il Mezzogiorno d'Italia, a building for 150 children along with five other minor buildings for schools of art and crafts. At the same time, he was developing his project for the church, revised in 1938, interrupted because of the war and then gradually brought to fulfilment in various phases until it was finally finished in 1961, enriched by numerous works of art, such as the large bas-relief in travertine of the façade. In these same years, also the large building of the hospice was completed, whose U-shaped plan and three storeys concluded the entire ground plan. See Nullo Pirazzoli (ed.), *Atti del Convegno. Arnaldo Foschini. Didattica e gestione dell'architettura in Italia nella prima metà del Novecento*, Faenza Editrice, Faenza, 1979, pp.86-89; D. Tassotti, *Ricordo di Arnaldo Foschini*, in "Evangelizzare", Bollettino mensile dell'Opera di Padre G. Semeria e Padre G. Minozzi, Rome, May 1968.

<sup>9</sup> The projects presented were developed within a Master's Degree Course of the School of Architecture Urban Planning Construction Engineering at the Polytechnic University of Milan, in an Architectural Design Workshop held during the AY 2016-17 and 2017-18. Profs. E. Bordogna, T. Brighenti, V. M. Finzi (Utility systems), M. Madeddu (Structures); Students: V. Boffo, L. Bongiolatti, A. Bugatti, S. Faravelli, M. Frisinghelli, A. Giamboni, C. Landoni, A. Sposetti (Trade Fair quarter, agricultural and food market); S. Angeli, S. Angrilli, M. Colombo, P. Escoriza Torralbo, M. Iotti (school complex).

<sup>10</sup> Both complexes, while in the current post-earthquake state of compromise, are characterized by a "campus-style" ground plan, with the individual school buildings for different levels and subjects interrelated and connected to the sports facilities and

the surrounding green areas, to form structures which are morphologically unitary and integrated. In particular, the lower school complex, close to the main gate in the city walls, are characterized by an elementary school building, a typical C-shaped structure with two storeys from the late 1950s, aligned with the main thoroughfare to access the city from the surrounding territory, with classrooms arranged in series along corridors overlooking an inner courtyard. Continuing upwards from one wing of the C-shaped building is another structure with three storeys above ground, and typical forms of the 1960s in unclad reinforced concrete, with dividing walls in brick and a gable roof, which houses the junior secondary school. In the open space delimited by these two buildings, anonymous rectangular prefabricated structures with only one storey above ground, house a gym and other service spaces, while all around, in a wooded environment characterized by repeated variations in height, are a large range of sports facilities open to the public in addition to school use, comprising a football pitch, tennis courts, and outdoor swimming pools with associated locker rooms.

<sup>11</sup> The project presented has been taken from a thesis by S. Faravelli and M. Frisinghelli of the Master's Degree Course in Architecture and Urban Design at the Polytechnic University of Milan discussed in the 2017-18 academic year. Supervisors: Profs. E. Bordogna, T. Brighenti.

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Lucio Valerio Barbera  
**Two Lessons from an Earthquake**  
**1 - Extreme City**  
**2 - Il Borgo**

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Abstract

The city of Naples and a small village of the region, Castelnuovo di Conza, were both struck by the November 23rd, 1980, earthquake. Naples, given its social importance, and Castelnuovo with its location in the crater of the seism, became emblematic sites of the tragedy and the reconstruction. The author of the article participated in a position of responsibility in the planning of the reconstruction and requalification both of Naples and the town of Castelnuovo. In the following pages he attempts to draw some lessons from the complex planning experience.

Keywords

Architectural unity — Irpinia 1981 — Castelnuovo di Conza

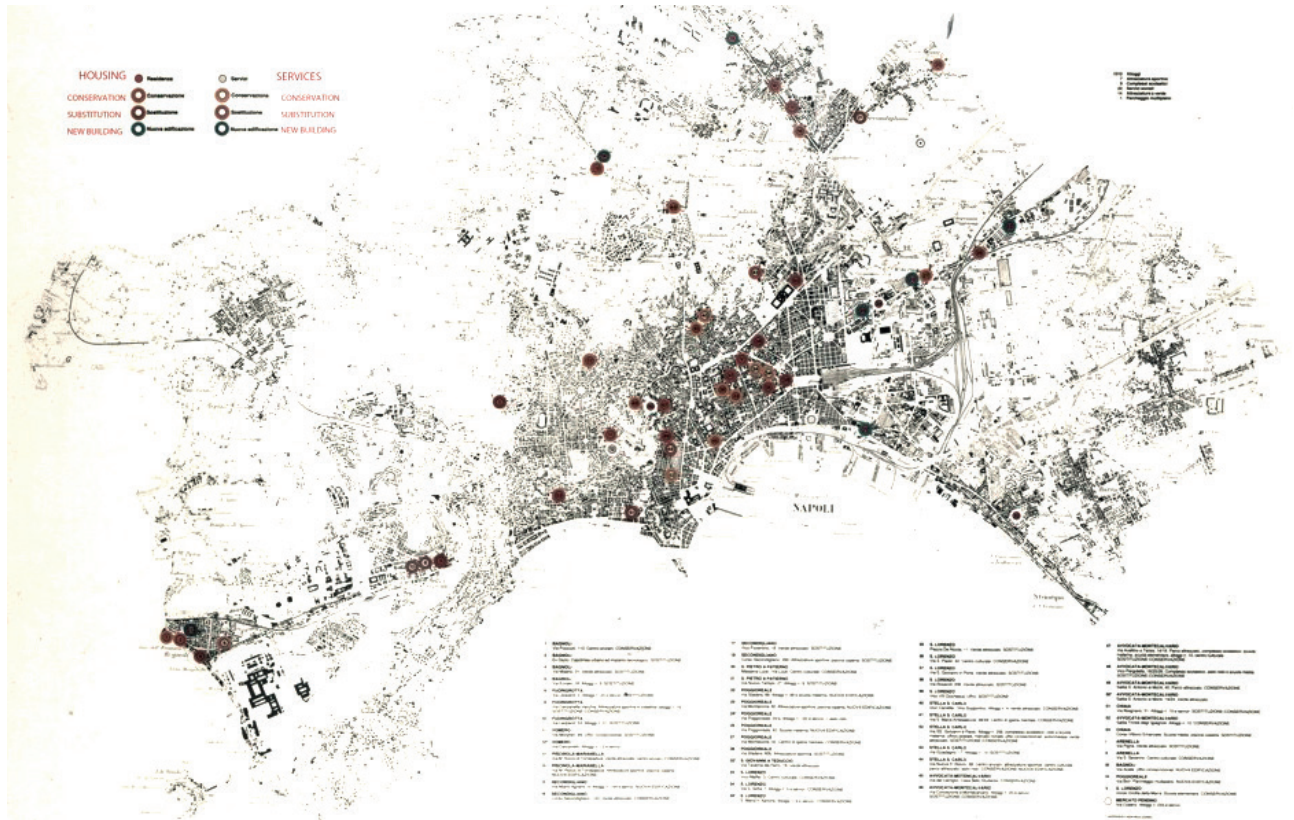
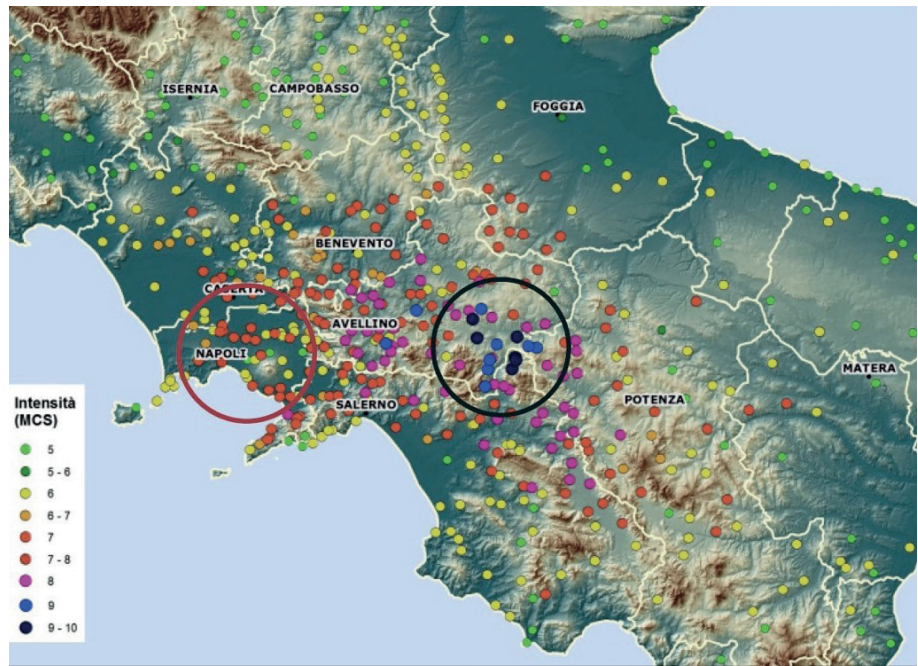
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**Premise**

The following pages present some reconstruction interventions, coordinated or planned by me, regarding a metropolis, Naples, and a village in Campania, Castelnuovo di Conza, studied and carried out in the same span of years, between 1981 and 1991. This, my presentation, therefore, deals with reconstruction projects for *a city and a village*, according to an adage in vogue today not only among architects and urban planners but also among transport and infrastructure engineers and even – these days with a pandemic – among urban health experts, that is urban well-being. City and village, Naples and Castelnuovo di Conza were both affected by the November 23, 1980, earthquake, went down in the annals as the Irpinia earthquake. Naples, given its social dimension, and Castelnuovo for its position in the crater of the earthquake became emblematic sites of tragedy and reconstruction. Having had the good fortune to participate with roles of responsibility and, at the same time, in both the reconstructive and restorative projects for the city and the village, constituted a very precious experience for me, at times exhilarating, which rewarded and comforted the effort, difficulties, and disappointments, of which there was no shortage. I hope that the following pages will be of some use to a future reader.

**Fig. 1**

The two epicenters of the Irpinia earthquake: in the black circle the seismic epicenter, the municipalities of the Crater and its immediate surroundings. In the red circle the so-called social epicenter, constituted by the metropolitan city of Naples, shocks its building structures, but above all social ones.



**Fig. 2**

The projects included in the Urban Center Sector in the Naples Reconstruction and Redevelopment Plan. The Centro Urbano sector included the historic city - known as the ancient center - the peri-urban settlements and the first modern belt.

## 1 – Extreme City

### THE Reconstruction of the Urban Center of Naples

#### 1981 - 1991

In the early 80s, last century, following the 23 November 1980, earthquake which struck much of Campania and whose epicenter was Irpinia, I was called to assume responsibility as Coordinator of the architectural and urban planning of a complex program of building and functional reconstruction and requalification for the Urban Center of Naples, to be implemented through more than 50 projects of vastly different scale and complexity. The sites and constructions requiring intervention were chosen by the Government Commissariat for reconstruction, in the living body of the ancient center, and in the first modern urban expansion, the whole of which constitutes the central organism – the urban center, in fact – of the current Neapolitan metropolis. This city, due to its deep historical stratification of building structures, its complexity and widespread hardships with its social body, and the extremely high cultural level – coexisting with the present urban and human complexity – may be considered “Extreme city” within the framework of the great cities of the Western world and, in particular, of the European Mediterranean.

The program that I was entrusted with was part of a much larger redevelopment program for the entire city of Naples. In fact, the event had two epicenters: one seismic in the area of some towns in Irpinia (Fig. 1, black circle) with enormous destruction (almost three thousand deaths) and a social one in the Neapolitan area (Fig. 1, red circle) with had few victims compared to those of the epicenter (about sixty deaths in the collapse of a modern residential building), but many of its building and social structures were shaken and damaged. The complete program for the reconstruction in Naples contemplated the construction of twenty thousand dwellings, implemented by creating the so-called Plan of the Suburbs (Piano delle Perferie), consisting of twelve integrated plans of new construction and urban recovery. But the Suburban Plan, by its nature, did not answer to the demand for public interventions in the city center. For this reason, the special Comparto Centro Urbano (Urban Center Section) was created and entrusted to the Edina Consortium, of the EFIM group, who in turn asked me to assume responsibility as Coordinator of architectural and urban design. The more than fifty projects of the intervention program of the Urban Center Sector (Fig. 2), for which I accepted the project responsibility, included two functional classes – residences and urban services – and three types of building intervention: restoration, replacement, and new constructions. Combining the two functional classes and the three types of intervention, the projects were grouped into six categories. But each of them was unique in design both for its historical characteristics and the always very unique characteristics of the context. To tackle such a complex task credibly, I established an interdisciplinary working group that included historians of architecture and of the city, structural and service planners, urban planners, landscape architects, and architects, including Arnaldo Bruschi, Antonio Michetti, Gianfranco Caniggia, and included in the Technical Scientific Committee I wanted Vittoria Calzolari, Alberto Gatti, Salvatore Bisogni, Antonio Lavaggi among the planners. During the coordination and planning activities, I was assisted, of course, by the Edina technical office as well as by the then young architects, Corrado Giannini and Silvana Manco, from my professional team, ProgReS, in Rome. The Government Commissariat for Reconstruction in turn set up a group of technicians and con-

sultants under Vezio De Lucia's guidance with the task of ensuring compliance with the guidelines for reconstruction in a continuous dialogue and collaboration with the planners of the concessionary Consortia. We were lucky enough to be followed, on behalf of the Government Commissariat, by a then young architect of great value, Giancarlo Ferulano, who was not only decisive for respecting the objectives of the reconstruction, but also for verifying the orientation of each intervention according to the social and cultural objectives of the program.

Precisely because I do not hide the fact that it would have been methodologically interesting, in the forty years since that undertaking, to have reviewed it critically, *as I have not*, I take the opportunity given me by FAM – which I sincerely thank – to attempt to focus on at least one of the problems that immediately emerged in our work and which soon became dominant. It has to do with the question of the relationship between the expectations of the “social client”, that is, the future users – and the objectives and aspirations of the planners. Naples is a city with a strong identity character, in which one gets the impression that the social amalgam of the ancient city, living almost intact, alongside an established and thriving bourgeois society. But while this, despite inheriting from the aristocracy of Neapolitan culture, has naturally borrowed most of the “transnational” manners that characterize urban societies anywhere else on our planet, which keeps all its “pros” – creativity and urbanity – almost intact along with its well-known “cons”, which emerge with the characteristics of a resistant archaism, distorted by modernity. In this too schematic picture – I realize and apologize for – however, what surprises and fascinates above all a Roman like me, the son of immigrants – like most of my fellow citizens – here in Naples, is the natural and surprising relationship between bourgeois and commoners, a relationship in which each, maintaining his own social identity, knows how to understand and speak the language of the other naturally, as if it were one of the keys in which the living musical monument is composed and performed day by day and whose unity everyone knows that participate in equally. In this complexity, however, our planning aimed at operating in the most disadvantaged folds and areas of the city, aimed by statute precisely towards the oldest and most identifying “social client” among those living in the city. For our and our work's good fortune, our commitment in Naples lasted almost a decade. We were therefore offered the opportunity to experience the city and, above all, the sites of our interventions, directly and over a long period. We felt, therefore, that we understood something. Something important regarding the relationship between our “social client” and the architecture of one's living space. Feeling unable to express it with my own words, I entrust the definition of what I seemed to have understood, to the words – now ancient within the “modern” – of Walter Benjamin, taken from the first pages of his book about Naples, its society and its architecture:

«As porous as this stone is the architecture. [*He is referring here to the stone the system of caves and ancient quarries of Naples were dug*] Building and action interpenetrate in the courtyards, arcades, and stairways. In everything, they preserve the scope to become a theater of new, unforeseen constellations. The stamp of the definitive is avoided. No situation appears intended forever, no figure asserts its “thus and not otherwise”. This is how architecture, the most binding of all communal rhythm, come into being here: civilized, private, and ordered only in the great hotel and warehouse buildings on the quays; anarchical, embroiled, villagelike in the center,

into which large networks of streets were hacked only forty years ago. And only in these streets is the house, in the Nordic sense, the cell of the city's architecture. In contrast, within the tenement blocks, it seems held together at the corners, as if by iron clamps, by the murals of the Madonna».

**“The stamp of the definitive is avoided. No situation appears intended forever, no figure asserts its “thus and not otherwise”** In these two sentences which, interpreted by a committed intellectual of our times, may make one think of a Benjamin indulging in a conventional image of our extreme city, struck me as I read them: they confirmed what I had learned not only by observing the reality of sites where we had worked in Naples but experiencing the difficulties with our first projects. Those short sentences confirmed, after all, that the choices we made after the first moments of misdirected certainties were at least an attempt to come closer, even if only a little, to the reality of the expectations of our “social client” and, above all, to the vitality of their indispensable way of continuously remodeling the environment according to their own cultural identity.

In what follows, I have therefore chosen to present four projects which, among others, seem to me to better represent our attempts. The first concerns the Recovery Plan and the building reconstruction of a historic settlement now incorporated three centuries in the city of Naples. Here, the reconstruction of the degraded urban fabric through new residential buildings and some services open to the public was dealt with by confirming the “courtyard block” as a more faithful urban typology in the expectations of the “social client” and using an architectural language based on the mimesis of colors and movements urban construction of the nineteenth-century, the last, I believe, in Naples to have made the transition from the baroque city to the city of positivism and early modernity with ease. The second and third projects were part of a redevelopment activity “by points” of a neighborhood with a very strong popular and historical identity. The fourth project consisted of the architectural intervention – it would be better to say “tectonic” – which was built in the heart of another Recovery Plan of an ancient neighborhood. The brief description of the four projects, apart from any judgment of merit – which can be negative in many respects – can testify, I believe, quite clearly both to our attempt to interpret the needs of the “social clients” and to their ability to appropriate naturally, but inevitably, each project with a few identifying touches, thus incorporating it in the reality of life.

#### **The Recovery Plan of the SS. Giovanni and Paolo neighborhood.**

Some interventions were intended to rehabilitate the entire historic nuclei of urban districts of the central city. One of these nuclei, almost a neighborhood in itself, in the area of S. Carlo all’Arena, called “Saints John and Paul”. It is an ancient urban settlement located outside the walls of the ancient city, incorporated into the urban area at the beginning of the mid-eighteenth century when, nearby, by the will of King Charles of Bourbon, the architect Ferdinando Fuga built the gigantic structure of the Real Albergo dei Poveri [Royal Hospice of the Poor]. A part of the ancient settlement, already partly abandoned, had been demolished immediately after the earthquake. Large voids had opened up in the ancient fabric. Among the other historic buildings of the nucleus, very ancient and ruined types coexisted, with an open courtyard and low density, together with nineteenth-century buildings of more dense urban consistency. Very high and low-quality modern buildings

**Figs. 3 1-2-3-4-5**

SS. Giovanni e Paolo Recovery plan and main building interventions.

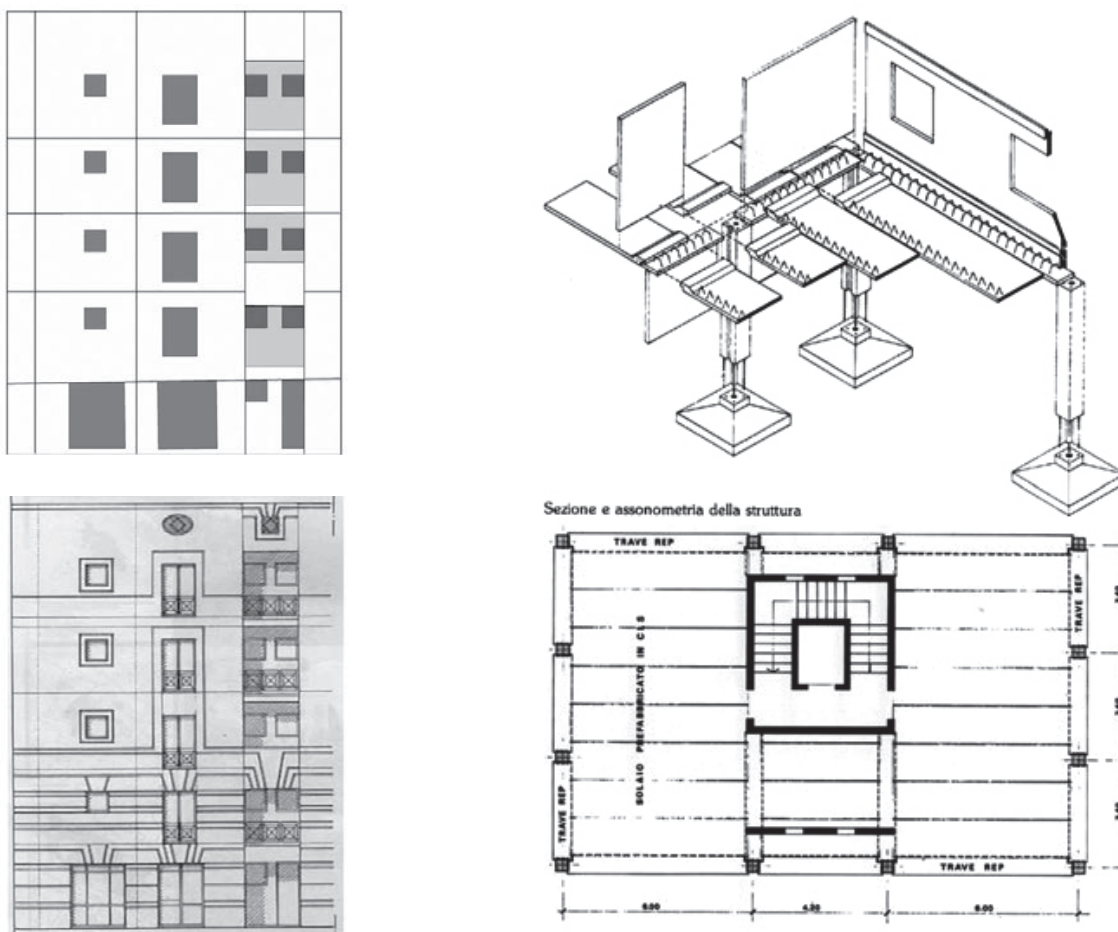
From above:

The fabric; The building stock;

The main interventions;

The main interventions carried out.



**Figs. 4 1-2-3**

Top left:

The window panels that make up the facades.

Lower left:

The same portion of the facade composed of window panels with a modeled surface.

To the right:

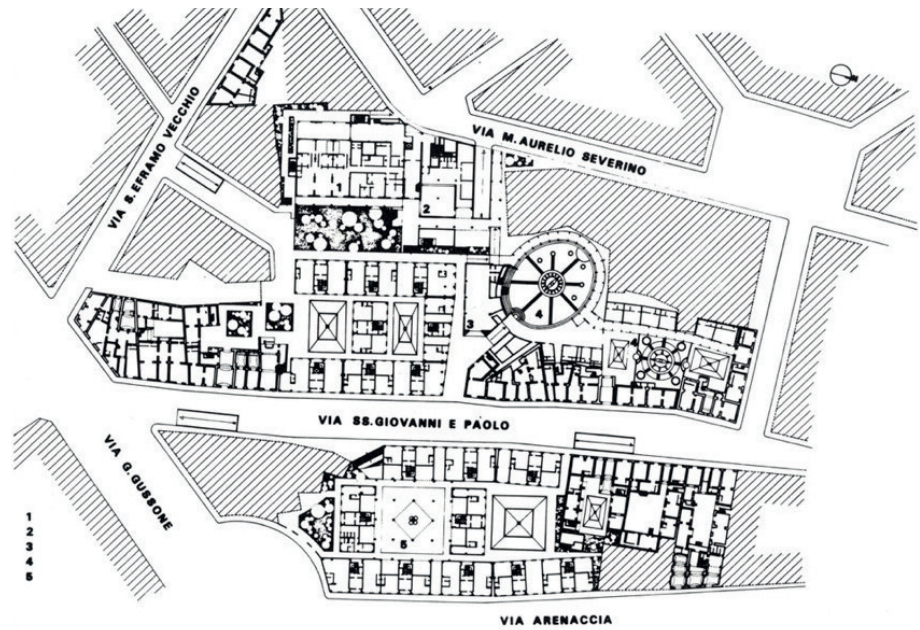
Axonometric diagram of the pre-fabrication system.

pressed around them. The main problem, in this case, was to reconstitute the environmental and functional unity of the neighborhood so that the population could naturally perceive and use the new buildings as being part of the local tradition, even though they were obviously built with industrialized and economic construction systems (Figs. 3-4-5).

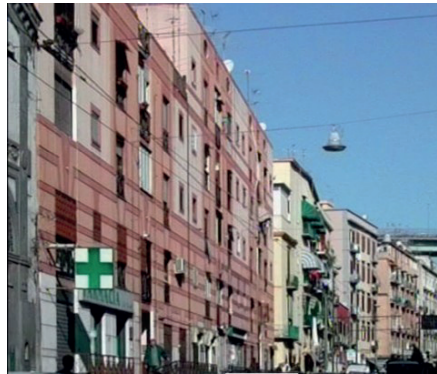
The construction system chosen is in itself very close, perhaps closest, to the traditional ways of making the structural shell, in that it brings the window back to the concept of simply a hole, varying in size, opened in a wall characterized by a repeated series of rather small voids compared to the prevalence of the solid surface. However, the prefabricated applications of this conception, which generated a well-known system – the window panel – in general give rise to among the most alienating images in modern construction: uninterrupted sequences of square holes with no qualifying element, obsessive hive walls, impossible to integrate into any modern, traditional or historical urban landscape. But if one looks carefully, the most familiar and welcome image that greets us from the walls that line the streets of the center of any of our historic cities is nothing more than the result of a simple symbolic and constructive – therefore architectural – the articulation of a masonry wall in which perforations tendentially equal and relatively small neatly – that is, monotonously – open up. In this context, taking into account the objective of inserting the new buildings into the existing environment without tearing away, we followed that traditional and well-tried path, engraving the surface of the prefabricated panels to compose a hierarchy of clear and efficient architectural symbols on the facades because immediately comprehensible (Figs. 4).

**Fig. 5 1**

SS. Giovanni e Paolo ground floors; main services: kindergarten, post office, district offices, covered market, pedestrian square.

**Figs. 5 2-3-4**

Overall and detailed views of the insertion of new buildings in the urban environment 30 years after construction.





**Fig. 6**

Two interventions in the urban fabric of Secondigliano.

A - Residential complex for 200 apartments at the Quadrivio di Arzano.

B - Wellness center: swimming pool, gym, gardens and outdoor sports fields.

### **Two interventions in the urban fabric of Secondigliano**

The redevelopment program entrusted to the “Urban Center” section of which I was project manager, in addition to complex interventions coordinated by the urban planning instruments of the Recovery Plan – of which we have seen an example in the previous pages – included a multitude of specific interventions, mostly mono-functional – residences, specific services, green areas. They were conveniently inserted into some openings in the pre-existing fabric with the dual objective of responding to the urgent demand for social housing and giving the urban environment equipment servicing the population. In this framework, I believe it useful to present two specific interventions, of different dimensions and functions – a low-cost residential complex and a service center for sport and well-being – located not far from each other along the axis of Corso Secondigliano (Fig. 6). In their dimensional, functional, and architectural diversity as well as in their management specificity, however, the two interventions were conceived as parts of a unitary – albeit very partial – contribution to the rehabilitation of a critical area of the Neapolitan belt. Corso Secondigliano is the name given to the Appian Way as it crosses the ancient periurban settlement which constitutes a complex, sometimes difficult social reality.

**A. The residential complex** situated in the so-called **Quadrivio di Arzano** – about 200 residences – has become famous due to a recent television series, mentioned in books and films that investigate the social complexity of that territory. The intervention was never really finished, because the residences, even before completion, were occupied by a lower-class population who settled them without respecting the rules for allocation. However, it has since been populated and basically fulfills its functions. The complex is organized around a main courtyard in the form of a square opening onto the Quadrivio di Arzano. The construction system is the same as in the previous example, but finished with lighter less contrasting colors: (Figs. 7).

**Figs. 7 1-2-3-4**

From above:  
General planimetry; Aerial photo;  
Project perspective: the main court;  
Side view of the complex.



**B. The Sport and Wellness Service Center**, overlooking **Corso Secondigliano**, includes a training pool, a gym, a martial arts gym, sports fields, and green areas. Using a common Anglo-Saxon term, this is a typical infill project that literally crosses the body of the urban fabric using a small sequence of free spaces, confined between the buildings. Composed of building structures and small equipped public areas, it connects the main road – Corso Secondigliano – to the interior of the district, without interruption ... The complex seems to work well and to have been very well received by the local population who turned it into a meeting and recreational center for individual and collective physical education (Figs. 8).

**Figs. 8 1-2-3-4**

From above:

Aerial photo of the Center; The Center in the building fabric; The front on Corso Secondigliano; Interior of the gym.



### Recovery Plan of Via Avellino in Tarsia and Parco dei Ventaglieri

Another Recovery Plan of a complex area of Naples' historic center concerned the ridge along which Via Avellino a Tarsia runs and its adjacencies up to the Ventaglieri area (Figs. 9). A fundamental element of the Recovery Plan was the reclamation and reuse of a large area between the bastions of the Tarsia ridge and Vico Lepri ai Ventaglieri, also affected by a vast system of quarries. In this area after the earthquake, it had been necessary to demolish a degraded and shapeless fabric of buildings already largely abandoned. In the void thus created, we realized an important urban park which includes a compulsory school, public gardens on different levels, and a system of lifts and stairs that connect the two parts of the area, the lower one, around Vico Lepri ai Ventaglieri, and the upper one, around Via Avellino in Tarsia (Figs. 10-11). The **Parco dei Ventaglieri**, as the completed project is now called, seems to have had considerable social success: spontaneous and public collective functions take place in its spaces, with active participation by the population (Figs. 12).

#### Figs. 9 1-2-3

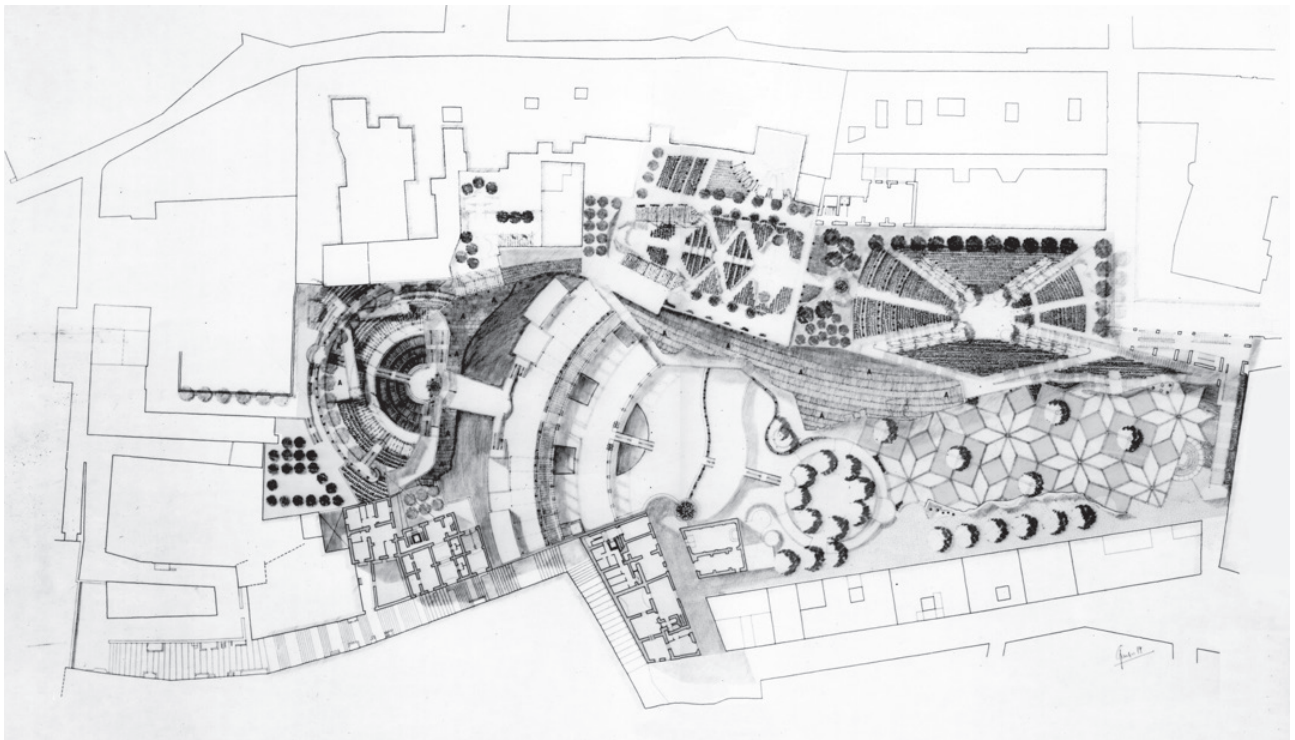
From above:

In red the perimeter of the historic center of Naples (Ancient Center and the Baroque extensions). In yellow the area of the Recovery Plan of Via Avellino in Tarsia; The system of ancient quarries; A table of the Recovery Plan: (title of ownership of the buildings).



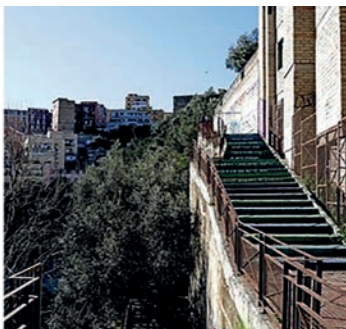
**Figs. 10 1-2**

The state of the intervention area before the implementation of the Recovery Plan and the Ventaglieri Park project.

**Figs. 10 3-4**

General project of the Ventaglieri Park project; General view of the completed project of the Ventaglieri Park. Note: the volumes and terraced terraces of the school complex; the gardens at various altitudes; the system of stairs and ramps that connect the different levels.





**Figs. 11 1-2-3-4-5**

Left from top:

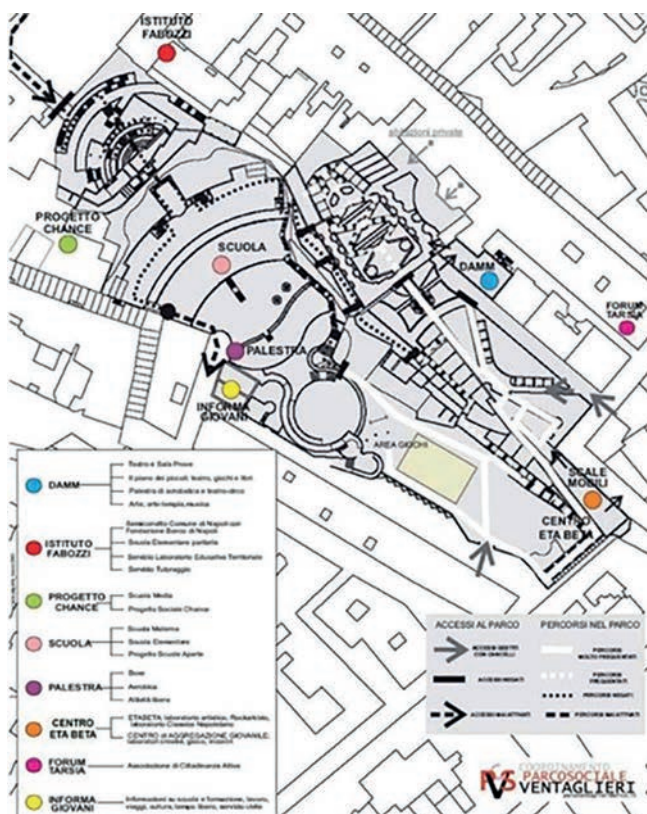
Some views along the paths between the different “horti” of the Park.

Right from above:

Views of the Ventaglieri Park in the urban fabric.

The Park project was conceived to promote integration between school functions and public spaces. Part of the school’s terraced roofs is also for public use, while the school itself can access some of the Park’s spaces. The gardens are connected by a system of paths that introduces, alongside the *horti conclusi* [enclosed gardens] and the rest areas, an invitation also to explore or to experience the sites privately or subjectively. The park is at the service of a vast urban and social environment; but a particularly positive effect was that of having indirectly given new quality to the daily life of those who live in the buildings of the immediate surroundings, today overlooking a public space which, more than thirty years after its construction, seems to be run with sufficient care and used with rare interest.

Ludovico Quaroni, under whom I was trained, taught us that the projects carried out are like children who become adults: we must not hope that they will remain as we have designed them, unchanged. On the contrary, we must wish them to attract interests unlike from ours and to know how, if loved, to adapt to those needs they will be called upon to fulfill. So, it truly doesn’t sadden me that a five-a-side football field covered part of the beautiful floor with large stars I had carefully designed in the lower square; instead, I am pleased that that space has found a function – unforeseen by me – which has increased its attractiveness. And it matters even more that the range of spaces of which this “demanding” Park is composed has stimulated the foundation of a “participatory” institution, the Ventaglieri Social Park, of which I include the link of the site, which talks about this project with more truth than I can express: <http://www.parcosocialeventaglieri.it/pagine/parco.htm>



**Figs. 12 1-2-3**

From above:

The functions currently active in - and around - the Ventaglieri Park; Cultural and recreational entertainment in the Ventaglieri Park.

## 2 - The Borgo

### The Reconstruction program of the Municipality of Castelnuovo di Conza 1981 - 1991

In those same years in which I was engaged in the redevelopment of the Urban Center of Naples, I was called, with my Roman team of architects, to look into the reconstruction of the Municipality of Castelnuovo di Conza, the closest to the epicenter of the Irpinia earthquake in the veritable seismic **Crater** (Fig. 13). The institutional framework of the project was far different from the one in which I worked in Naples: this time the leader of the planning task was an important engineering company, Technital of Verona – that collaborated with the technicians of the Civil Protection and the Government Commissariat for Reconstruction especially on the purely safety and seismic aspects. My workgroup, which also had the aspects of a planning company – ProgReS (acronym for Progetti, Research, and Studies) – had acted for years as a constant reference for the lead company in architectural and urban planning in Italy and abroad. As mentioned above, in ProgReS I shared my responsibilities in planning with the then young Corrado Giannini and Silvana Manco. In the case of Castelnuovo di Conza it was Corrado Giannini who followed the work with increasing autonomy from setting it up to planning and its realization. Corrado Giannini and I had known each other for decades. I had met him in the early sixties of the last century, when he, together with Francesco Cellini, Maurizio Cagnoni, and Domenico Cecchini was among the best students of the last years of the faculty of architecture of La Sapienza in Rome, where I was already carrying out my early role as professor. During the years of the reconstruction of Castelnuovo di Conza, he was assisted with great intelligence by Mario Andreanò, who directed the studio founded specifically by Technital in Battipaglia; for some preliminary ideas, we called Francesco Cellini to collaborate with us, as we had often done in previous years in other projects. The Municipality of Castelnuovo di Conza, although part of the province of Salerno, lies on a ridge of the north-western offshoots of the Lucanian Apennines, at 650 meters in the upper valley of the Sele river. Its main town – the “paese” – had suffered devastating destruction on the evening of November 23, 1980, when the earthquake struck violently. The oldest part of the town was completely destroyed (Fig. 15) and the number of deaths – 85 out of about a thousand inhabitants – was not worse only because the quake occurred at 7:30 pm on Sunday. People were still in the square before dinner; the town lived as a cohesive community, the streets were spaces of collective life. The highest, oldest, and steepest part of the village was razed to the ground. The square located at the central point of the ridge remained mutilated. All the buildings to the west were swept away by the earthquake, those to the east, though standing, were severely damaged (Figs. 16). Even if time had already made the tower, evident in the ancient prints and the civic coat of arms, disappear (Fig. 14), until the evening of the earthquake everyone was all gathered around the highest and oldest summit of the ridge, where the remaining walls of the castle and the small patronal church emerge (Figs. 17). The form of the town and the social identity still corresponded: but that evening the identifying aspect of the town dissolved. The geological examination that preceded the planning we abandoned the idea of reconstructing the part of the ancient settlement razed to the ground by the earthquake: in that site, the subsoil was composed of a bank of large fragmented intrusive rocks, which would enter into devastating resonance with a seismic wave, as had



Lo stemma di Castelnuovo di Conza oggi

**Figg. 13 1-2**

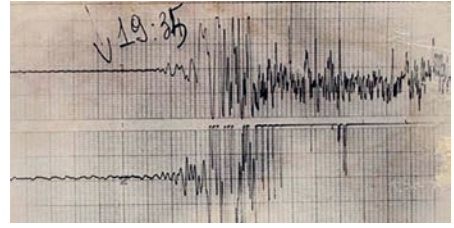
A print, 17th century: the village gathered around the castle and the church; Coat of arms of Castelnuovo di Conza.

happened. The project plan took the form of a very detailed General Town Plan, which we can consider composed of two parts: what remained of the Historic Center was the subject of a meticulous study as in a real Recovery Plan. The studio established, building by building, the technical and architectural characteristics of the reconstruction and the anti-seismic, functional, and aesthetic building restoration. And also defined in detail the characteristics of the recovery of the public spaces, alleys, streets, and squares of the ancient center. For the new buildings, necessary to replace those destroyed by the earthquake, the Plan was truly a Detailed Planivolumetric Plan; besides choosing the areas of intervention, it planned in detail the network of public spaces and established the typological, volumetric, and architectural characteristics of the buildings of the new expansion. Among the newly designed buildings, the new parish church stands out, located in the main hub of the new expansion, where most of the population now resides. In the Master Plan, we included a small residential settlement that had already been built. It was built on the initiative of Indro Montanelli and was quickly put into operation, immediately after the earthquake, a prefabricated system in reinforced concrete. But the current settlement of Castelnuovo di Conza also includes another neighborhood in its own right, not included in the Master Plan because it consists of the temporary prefabricated wooden houses, which should have been dismantled and removed after the reconstruction. In fact, once assigned, those houses were never returned and became part of the patrimony in use by almost every family of Castelnuovo. They had been made by a famous South Tyrolean company. Solid and well built, with a not unpleasant aspect – even if out of place in the Lucan Apennines – they further expand the surface occupied by the modern settlement, in any case much further than that of the ancient town if only for reasons of adaptation to the modern “urban standards” (Fig.18).

The Regulatory Plan envisaged transforming the area where the town had suffered total destruction into a “Park of Remembrance”. The simple weave of the ancient “vichi” [lanes] would have constituted the design of the paths in the green. The park has not yet been built, but the ridge begins to take on the naturalistic aspect of a densely wooded area and it seems that the idea of eventually creating a real urban park has not been abandoned. What remains of the historic center now contains only a few sites and buildings belonging to tradition; they do seem capable of at least partially reacquiring, but with great dignity, the identity function they had in the past (Figs. 18). But in the meantime, the country has shifted its center of gravity towards the areas of an easier settlement, towards the north. Today the new part of Castelnuovo is four times larger and more densely populated than what remains of the old center. And this, I believe, has given satisfaction, but also disorientation to a community already severely affected by the earthquake. Certainly the seismic event, in a small town – such as Castelnuovo di Conza – has marked the inhabitants deeply: in personal affections, in goods, and especially in their collective identity. In such conditions, that is, when the “home” of a community historically rooted and integrated within its natural environment is damaged or destroyed, the loss of the forms of the location is accompanied by a risk of weakening of community relations. It would be up to those who plan the reconstruction to imagine the form of the new settlement as that of a new “home” of the established community, a “home” ready to support or even stimulate the rebirth of the “recita a soggetto” [Tr. note: a form of improvised acting] which collective life always is. A performance that cannot exist if there

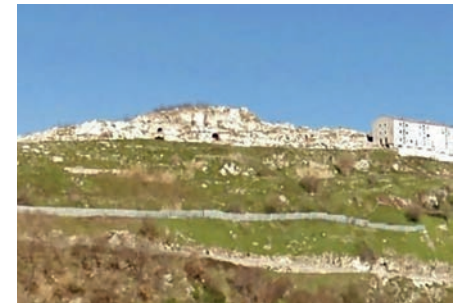
**Figs. 14 1-2**

The seismic crater; On 23 October 1980, 7:35 pm, the seismogram leaves the track.

**Figs. 15 1-2-3-4-5**

From above:  
Photo after the earthquake. The oldest part of the town was razed to the ground; The profile of the country from the south in a photo before the earthquake; The current profile of the country from the South; The profile of the country from the north in a photo before the earthquake; The current profile of the country from the North.

N.B. In figures 15.4 and 15.5 the horizontal brackets in red correspond to the same portion of the ridge where the oldest part of the town stood.



is no “participation” and which, therefore, cannot be such if the project has not prepared places, spaces, situations that can lend themselves – according to the needs and inspiration of the living generation – as possible scenes of that play. However, in general, the use of the above mentioned modern building and urban planning “standards” directs the overall design of settlement expansions towards the creation of models that are certainly not comparable with those of historic Italian settlements, villages, or cities.

**But it’s not enough.**

In this context, therefore, the maintenance and care of what remains of the original historical settlement in the new communal organism are fundamental not only for the preservation of an unrepeatable historical asset, a testimony to the culture from which we come but above all to give new generations the most suitable scene for the expression of the most intense and memory-rich



**Figs. 16 1-2-3**

From above:

The “country” before the earthquake; Damage suffered by the earthquake; The current state of the “Historic Center” after the reconstruction.

moments of their collective life. But more than that; in our time, as we apply ourselves to restoring a “home” to communities touched by tragic events or neglect, we know that those same communities have been in crisis for some while. A perhaps slow crisis, but inevitable; it is the crisis in which the myriad of ancient minor settlements on Italian territory, the “villages”, which, if not caught up with, devoured, and digested by the suburbs of the metropolis, are slowly abandoned by the new generations. Castelnuovo di Conza which had about a thousand inhabitants on the evening of the earthquake, today has just over five hundred. The substantial improvement of housing conditions, the renewal of the entire building stock, the redevelopment of public spaces was not enough to curb the phenomenon I call “urban anemia”: it first accelerated, and then, perhaps, it has slowed down. But it has not reversed. The town, although modernly renovated, loses about one hundred inhabitants every five years. For this reason also, the municipal administration and the mayors who have followed one another, often passionate lovers of the history of the “village” and its territory, are working to restore to the surviving places of the old historic center that soul they seem to have lost, despite their redevelopment; the soul that is, I say, the ability to attract and, at the same time, represent the community. We must hope that it is not too late while the process of “urban anemia” continues. In fact, it is not enough to rebuild, requalify, and restore. Something more decisive is needed. There is a need to deeply innovate the territorial settlement network of which our villages are part, which, in our case, for example, is made up of cities – Salerno, Potenza, Naples – of the densely inhabited countryside – between Castellamare, Pompei, Sarno, Nocera Inferiore – and of the many villages and mountain villages similar to Castelnuovo. The aim must be to make each still functioning center or agglomeration a node – or a link – of a fast digital network and, above all, a public transport network suitable for the great present metamorphosis. On the one hand, therefore, it is a question of reacquiring, with a bit of humility, the old idea that Giancarlo De Carlo tried to implement very early in Colletta di Castelbianco – a splendid village clinging to the Ligurian Alps – on the other, without trepidation, it is necessary to re-explore the ideas of alternative public transport systems that even have distant, nineteenth century, historical roots. But closer to us, who does not remember the passion of the Sixties for a category of mechanized transport that would have made it possible to travel long routes and difficult gradients in a straight line, with faster systems, lighter than all those we have been used to in a sluggish industrial development? It is certainly not up to me, architect, to explore the renewed category of “hectometric transport” (what an abstruse name) – cable cars, funiculars, vertical and inclined elevators, people movers. But it is certainly up to me to point out the integration of our work with that of IT engineers as essential, of course, but above all of the designers of infrastructure and transport systems, the most advanced. So why not look around the world with eyes capable of finding innovation where it really emerges? why not understand how much “disseminable” innovation already exists in the experiments of some collective transport systems that until now have seemed to us only “niche” demonstrations, such as the cableways systems of Singapore and of a growing number of major and minor Chinese and South American cities and transport on public helicopters-buses? How else can we continue to believe that rebuilding, redeveloping, restoring with our care, that of us architects, is enough to render our villages, the urbanized countryside, but also our historic cities, the privileged places of a way of life suitable for our times? And above all adequate to the needs of future generations?

**Figs. 17 1-2-3**

Castelnuovo Conza today; The arrival in the country from the North; in the background, on the right, the wooded hill where the oldest part of the center stood. The country has “changed direction”. From a typical ridge settlement it is now a town resting on slow parallel steps. What remains of the ancient center acts as a unifying backdrop for the new alignments. But the new town doesn't stop there. See figure 17.3.



- Perimetro dell'area del Vecchio Centro Storico.
- Perimetro dell'area di espansione secondo il PRG.
- Perimetro dell'area di espansione detta Villaggio Montanelli.
- Perimetro dell'area del villaggio provvisorio/permanente in legno.



**Figs. 18 1-2-3-4**

From above:

The remaining part of the ancient town, now the Historic Center; A typical staircase of the historic center; A vico; The square, called Lu Chianedh, restored after the earthquake, comes back to life in religious recurrences.



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Carlotta Torricelli  
**The reconstruction of the Chiado in Lisbon.  
Álvaro Siza and the artifice of heteronomy**

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Abstract

The plan conceived by Álvaro Siza to rebuild the Chiado neighbourhood in Lisbon, following a blaze which wiped out four whole city blocks between Baixa and Bairro Alto in August 1988, was based on a dense system of relationships at different scales. Siza's proposal worked on redefining the relationship between the volumetric structure of the destroyed buildings, organized within the Marquis of Pombal's grid plan, and a system of interstitial spaces which rediscovered traces of ancient routes, hidden away by the Cartesian rigour of a reconstruction following the earthquake of 1755. Siza proposed a spatial experience which allows us to amble through the various layers of the place's memory, where the traces of the fire are intermingled with those left by the earthquake. A web of perceptual and mental connexions which substantiated the idea of a city based on relationships, with the fabric seen as a three-dimensional web of geometries and epochs, supporting the implementation and development of a body which is sometimes complex, sometimes not, as opposed to a flat pattern punctuated by events.

Keywords

Reconstruction — Urban Design — Public space

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In August 1988, just a few days after the blaze which destroyed eighteen buildings in the centre of Lisbon, the Municipality instructed Álvaro Siza to draw up a detailed plan to reconstruct the damaged area, which involved four whole city blocks of the Chiado neighbourhood. The firm of this architect from Porto<sup>1</sup> had the support a municipal technical office specially set up under the guidance of Victor Manuel Pessanha Viegas, which permitted the coordination of an architectural proposal containing all the many aspects which entail essential repercussions in the design of a plan: from the relationship with the infrastructure to administrative issues, in particular that of land reorganization, which is fundamental in reconfiguring open spaces in negotiations between the public and private sectors. In fact, if with respect to the volumetric arrangement of the buildings towards the street, the alignments and the related design of the façades – strongly identity-making elements of a part of the city seen as a unitary whole and not as a sum of individual artefacts – the choice fell on substantial maintenance, as well as an interpretation of public land – partially released for private property, partially recovered with operations of thinning inside the lots – which constituted the fundamental element in redefining the location's identity. As a result, the new design, through a sort of archaeology of memory, worked on the margins, on the transition areas, where time had accumulated different possibilities and rediscovered the spatial values of that medieval city wiped out by the earthquake of 1755 and given a new form by the Marquis of Pombal's reconstruction work. It was in fact inevitable that the Chiado fire would take the collective memory back to that traumatic event, like a short circuit, and it is particularly interesting to look at the plan of the damaged area to re-



**Fig. 1**

Lisbon, plan of Baixa with a reconstruction of the sketch of Layout no. 5 by Eugenio de Santos in 1780, superimposed on a drawing of the blocks destroyed by the 1755 earthquake. The lots involved in the project to reconstruct Chiado following the 1988 fire have been highlighted. The route of the metro line and the underground connection between the Chiado stop and the lift inside the Grandes Armazéns do Chiado are indicated. Álvaro Siza's architectural proposal compared and matched with the new access and crossing system which connects the area to the more complex series of transformations involving the whole of Baixa. Original scale of the drawing 1:10.000. Graphics by Ambra Lofrano, 2021.

read certain aspects of the Enlightenment project in fine detail. In fact, it is immediately clear that the effort of this reconstruction can be linked to a broader programme to regenerate Baixa – a fact partially thwarted by subsequent political decisions.

The choice of Siza's name was significant: he was not an architect from Lisbon, but from Porto, whose design thinking was deeply rooted in the experience of the SAAL Brigades<sup>2</sup>; a figure who in those years was establishing himself on the European scene thanks to the construction of residential complexes in Berlin and The Hague, while at a national level he was dealing with construction of the Malagueira district in Évora, giving life to a skilful interweaving of traces of the old and new foundations. The idea of holding a competition was excluded, and this raised some objections. And yet the intention behind this choice was not to replace this part of the city with an architectural “insert” signed by a starchitect, but identifying a design sensibility capable of finding in a dialogue, in a relationship, a reconstruction strategy which would leave room for a memory of the place as well as possibilities of future transformations. What was immediately recognized as a heritage to be preserved was the overall historical and architectural environmental value of the neighbourhood, not only because of being stylistically relevant, but because it was a part of the common sentiment of this ancient city. And this was why the idea of putting one of the leading exponents of the so-called “Porto school” to the test was so persuasive, within which a precise way of looking at the question of the relationship between the old and new in architecture was transmitted. It is certainly in the work and teachings of Fernando Távora that we find an



**Fig. 2**

Lisbon, aerial photograph of Chiado after the 1988 fire. Chiado occupies a transitional position between the level where Baixa lies and the Bairro Alto hill, and has long represented one of the most important civic and commercial areas in the city. The slope on which the built fabric is arranged is crossed by the Santa Justa Lift, whose terminus reaches, across a suspended walkway, the ruins of the Carmo Convent and Church, a Gothic complex which remained open to the elements after the 18th-century earthquake.

Álvaro Siza collection - Canadian Center for Architecture - Gift of Álvaro Siza © Álvaro Siza.

underlying design thought passed down on the drawing boards for many decades. An aptitude, that is, to conceive a new work in relation to the “circumstance”, that is, «the whole set of factors which gravitate around an architectural event», cultivating an awareness that «systematically implies a critical stance, which, with respect to the status quo, implements a re-signification»<sup>3</sup>. This aptitude, far from representing an expression of flaccid thinking, acceptance of a sort of predestination, or the implementation of an attempt at mimesis, affirmed the strength of the design act as a form of knowledge and stressed the intrinsic link between formal investigation – declaredly autonomous – and a search for rootedness with the place and consequently with the history of which it would become the theatre. In this process, invention always corresponded to a discovery; and it was Álvaro Siza himself who recalled this, when he recounted how he had a eureka moment, later proven by historical documents, to reopen the connexion with the southern side of the Carmo Convent: «This confirmed my idea regarding what had been done and seems to have disappeared, in reality it still remains, it is only necessary to look for it. The architect is also a detective; there is a latent presence, the interventions on a city never disappear, they remain there and can be ignored or used as a support for a project<sup>4</sup>».

In fact, at Chiado, the reconstruction was intended as a rewriting, and was based on a constructive reading of the reality of the destruction, without leaving room for rhetoric, monumentalism, or nostalgia. Through a dense system of relationships at different scales, Siza redefined the place, intertwining heterogeneous epochs in a fresh urban vision, where the authorship of the project remained a “figure”<sup>5</sup> etched into the fabric, emerging in a few measured signs of an “interstitial nature”<sup>6</sup> which

demonstrate the possibility for a contemporary language to construct a new text, intertwined with the language that gives voice to the built substance of this part of the city. And if what Massimo Cacciari affirmed is true (1998, pp. 6-8), that the sense of belonging to a place resides in the fact of “speaking” its language, that language which “is not grammar or syntax, is a set of possibility that I discover gradually which ... I act in, which I work within”, then what the architect Francisco Barata wrote about the idea of the city as a collective work is also true, namely that: «if we were to make an analogy with writing, the city would look more like a newspaper than a jointly written text. It is like an open global project, one which binds unity and meaning to texts that are independent and autonomous<sup>7</sup>». Again, in the reconstruction projects, the architect’s autobiographical memory and the plural imagery rooted in the place of the catastrophe, produced a tension, in a chorus of voices which admitted fractures and suspensions. Destruction inspires new inventive processes; in the project to reconstruct Chiado, Siza found a principle of coherence in the rigour of the method, leaving each voice its own space, in a pulverization of the author, in a declared heteronomy, which syncretically shows the various identities that make up a single place.

These, in short, are the reasons why it is now relevant to reconsider certain aspects of this experience as the application of a strategy capable of restoring the role of synthesis among the many specialist contributions which collaborate in a reconstruction process. The destruction syncretically revealed the latent possibilities of a place, while the new design reactivated the energy buried deep in the mineral debris, for the construction of new images. We could therefore say that the reconstruction project, as well as the journey into the conception of Claudio Magris (2005, p. XV), relied more on the sense of possibilities than on the principle of reality: «as in an archaeological excavation, other layers of reality are discovered; the concrete possibilities that have not materially been realized but once existed and survive in shreds forgotten by the passage of time, in open passages, in still fluctuating states».

Chiado occupies a transitional position between the heights of Baixa and the Bairro Alto hill, and has long been the hub of an intense social, cultural, and economic life. In the years preceding the 1988 fire, this neighbourhood also suffered from the transformations which affected the whole city centre: a progressive depopulation and a crisis among the commercial establishments. The strong reaction of the whole of the citizenry to the fire demonstrated on the one hand the persistence of its identity-making role, but at the same time the collective awareness of a need for its transformation. For this reason, the guidelines established by the Municipality immediately showed an intent to reconstruct the totally destroyed or severely damaged lots, but also to implement a physical reconstruction in a more general process to regenerate the area, an attempt to rediscover the profound connexion which linked the various activities reintroduced and the urban structure that hosted them<sup>8</sup>.

The design of this part of the city, characterized by its topography – which entailed the construction of various types of connections between the differences in height: very steep streets, stairways, platforms, etc. – and from the presence of various religious complexes. It shows the extreme efforts made by the Marquis of Pombal’s plan to maintain its morphological continuity, by hybridizing with real conditions, as well as its ability to draw

some of its fundamental rules from the extant city. Indeed, the position of the eastern side of the Convento do Espírito Santo da Pedreira – whose imposing bulk dominated the slope – was one of the factors which helped to determine the positioning of the orthogonal grid of the Enlightenment city. In the grounds of the convent, heavily damaged by the earthquake, was built the Palácio Barcelinhos, which in 1894 became the seat of the Grandes Armazéns do Chiado. This building, together with the Art Nouveau-style Armazéns Grandella,<sup>9</sup> along with the volume of the Carmo convent, represents the only exception compared to the Pombal typology which constitutes the underlying pattern of Chiado's urban fabric. In effect, despite the deformations imposed on the plan by the unevenness of the ground, the rigour with which the rule was pursued made it possible to extend the identity of Baixa by scaling the retaining walls of the hill. And it is precisely when we witness the faltering of Cartesian logic in the face of a topographical complexity that we understand the value of this strongly unitary vision of the city. In fact, in the dialogue with the specific nature of the place, the tension takes shape between the principles underlying the abstract rule and those that Carlos Martí Aris (1990, p.85) defined as the «verification of the norm, variations and compromises», capable of revealing its ability to adapt to a specific condition. Observing the moment when an idea of a plan demonstrates the possibility of undermining one's limit from within, it is impossible not to refer, once again, to the reflection that Giorgio Grassi (1988, p.32) dedicated to the Roman cities of Timgad and Djémila, underlining how in the latter we can witness the ability «to learn, understand, and adapt to that same elementary idea».

To speak of Lisbon, or rather, to understand its urban structure, we must first of all become familiar with the nature of the place on which its settlement is arranged: i.e., its geography. An irregular site sprawling across a vast protected bend which precedes the point where the River Tagus flows into the Atlantic. From this natural harbour, dividing the area on which the built-up area would be arranged in two parts, a flat valley stretches out, defined by the surrounding hills: to the east the harsher one of the São Jorge Castle, to the west the one where Bairro Alto was built. Baixa stretches out on the central plain which descends to the northern bank of the watercourse.

Fernando Pessoa opened his notes on what the tourist must see thus: «Over seven hills, which are as many points of observation whence the most magnificent panoramas may be enjoyed, the vast irregular and many-coloured mass of houses that constitute Lisbon is scattered. For the traveller who comes in from the sea, Lisbon, even from afar, rises like a fair vision in a dream, clear-cut against a bright blue sky which the sun gladdens with its gold. And the domes, the monuments, the old castles jut up above the mass of houses, like far-off heralds of this delightful seat, of this blessed region<sup>10</sup>».

In Lisbon, the urban text unfolds according to a strongly persuasive criterion of continuity, where the exceptionality of certain urban artefacts finds its role only within the maze of a tight and continuous narrative. Here, the architecture of the city was able to convert the facts of history into form, presenting a multiple, multifaceted face to the citizenry who recognized themselves in it, with reference to a clearly defined identity, and elements and parts which are heterogeneous, in a pattern of relationships on a territorial scale. It goes without saying that this reflection cannot be

extended indiscriminately to the whole city, all of its parts, and each single phase of its development. However, what is undeniably recognizable, in certain periods of its history and in some of the projects which influenced its transformations, is a common effort to search for a coherence between the urban and architectural conceptions. In particular, the effort of the refounding act, which the Marquis of Pombal carried out following the earthquake, still represents an unavoidable connexion for all projects dealing with this place today<sup>11</sup>.

The breath of the city of Lisbon – the capital of a small kingdom, the last bastion of continental Europe, and the gateway to a colonial empire with vast borders and constantly changing fortunes – proceeded at a syncopated rhythm throughout the course of its history, seeing periods of glory alternating with moments of crisis. And yet, or perhaps precisely by virtue of these continuous ripples, the identity of the city remains recognizable, just as its myth can be recognized, a point of convergence between culture and the physical signs that shape them.

Perhaps for this reason, when on the morning of the 1<sup>st</sup> of November 1755 a violent earthquake destroyed between a half and two-thirds of its buildings in the space of a few minutes, the whole world felt the shock. As is well known, while this calamity shook the roots of Enlightenment optimism, it also offered the opportunity to a small country like Portugal, at that time fossilized in late Baroque culture, to reinstate itself and reconnect with the culture of Europe. Indeed, to enter the very heart of the contemporary debate, as a theatre of what would not be merely a reconstruction, but a “recreation”<sup>12</sup> of urban culture and its principles. The catastrophe opened up an unprecedented field of experimentation in which a tricky balance was sought between theoretical models and pragmatic empiricism: a complex ideological, formal, symbolic and functional synthesis. On the one hand, the desire was to take the opportunity to shape the city of the new rationalism, on the other, the urgency and drama of the status quo forced any abstract models into a direct confrontation with tradition, convention, and concrete experience. In this process, the architects involved played a fundamental role in translating the demands of emerging political power into an urban configuration, one which could maintain the signs of the place’s memory. In fact, as Gonçalo Byrne has pointed out, despite the almost total cancellation of some of its parts: «The new city was not created out of nothing, but within the previous one, filling the empty spaces of the damaged zones, recreating its destroyed centre with new symbolic and monumental values, continuing expansion between undamaged zones, or in areas adjoining their margins, and taking a great deal of care over the connection between old and new»<sup>13</sup>. There was an awareness and aspiration that the reconstruction plan would represent a matrix for the subsequent development of the city over a vast horizon of time. Consequently, the strategy defined by the military engineer Manuel da Maia – recruited soon after the disaster by the Marquis of Pombal<sup>14</sup> to address the theoretical side of the project, by consulting various architects and overseeing the operations of those working in the *Casa do Risco* (Municipal Design Department) – was translated into an urban figure from the roughs produced by the architects Eugenio dos Santos and Carlos Mardel. These two preparatory tools were flanked by a solid executive apparatus consisting of regulations – which also allowed operations at an administrative level – and models – which made it possible to investigate



**Fig. 3**

Lisbon, plan of the Chiado blocks included in Álvaro Siza's reconstruction plan. The system of open spaces defined by the 1990 project is highlighted, which included private areas sold off to the public. In the quadrangular block located between Rua Ivens, Rua Garrett, Rua Nova do Almada and the staircase of São Francisco (Block A), the central courtyard has been organized as a collective place accessible from three passageways. At the southern terminal of the Armazéns do Chiado building (Block C), the passageway which connects Rua do Crucifixo with Rua Nova do Almada at two different heights has been reintegrated. For Block B, the drawing shows the relationship between the connection system defined by the 1990 plan and the pedestrian connection project for the Terraços do Carmo developed in 2008.

Original scale of the drawing 1: 2,000. Graphics by Ambra Lofrano, 2021.

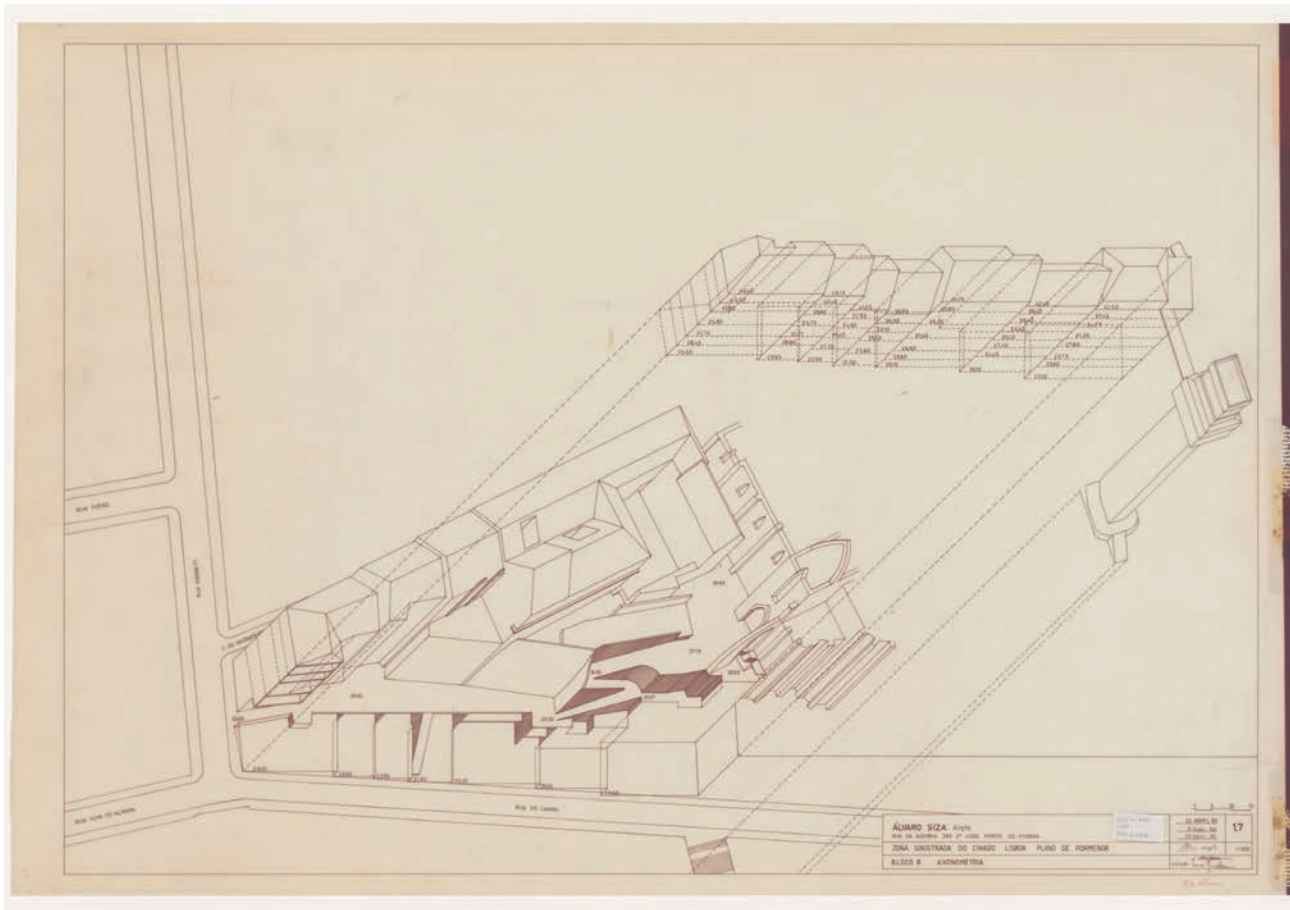
issues both on a technical level, through the creation of such construction approaches as the *gaiola*<sup>15</sup>, and on a representational level, through the design and control of the façades as well as the open spaces in the built environment.

The unifying element of the urban design, understood as continuous, is the façade, a limit to mark the transition between the public and private spheres, between the possibility of imposing a certain system of rules and the margin left open to variations and subsequent transformations. This system hinges on three fundamental elements: the layout, the standard elevation, and the cross-section. It is somewhat surprising that in the archival research, investigated further precisely in relation to the drafting of the plan for the reconstruction of Chiado, there are no indications on the plan of the Marquis's house<sup>16</sup>.

It is from this consideration that Siza drew the criteria of his “open” strategy<sup>17</sup>. Of the eighteen buildings which stand at the intersection of Rua Nova do Almada, Rua do Carmo and Rua Garret – with the exception of the aforementioned volumes of the Grandella and Chiado department stores – all of them substantially follow the Marquis's typology – while showing different degrees of maintenance and alterations with respect to the original model, whose spatial relationships within the plots have been compromised.

Recognizing the collective value of the façade designs, and therefore of the construction rule which governed the scheme, the architect restored the elevations of the destroyed buildings to a greater uniformity in terms of height and rhythm, in a rigorous interpretation of the rules defined by the *Casa do Risco*. In this way, Siza bypassed the specious debate on the convenience of preserving or reconstructing the façades, by drawing directly on the original design of these buildings, without mediation.

Also in the executive model, the process borrowed some fundamental principles from the Enlightenment reconstruction: the fact of being



**Fig. 4**

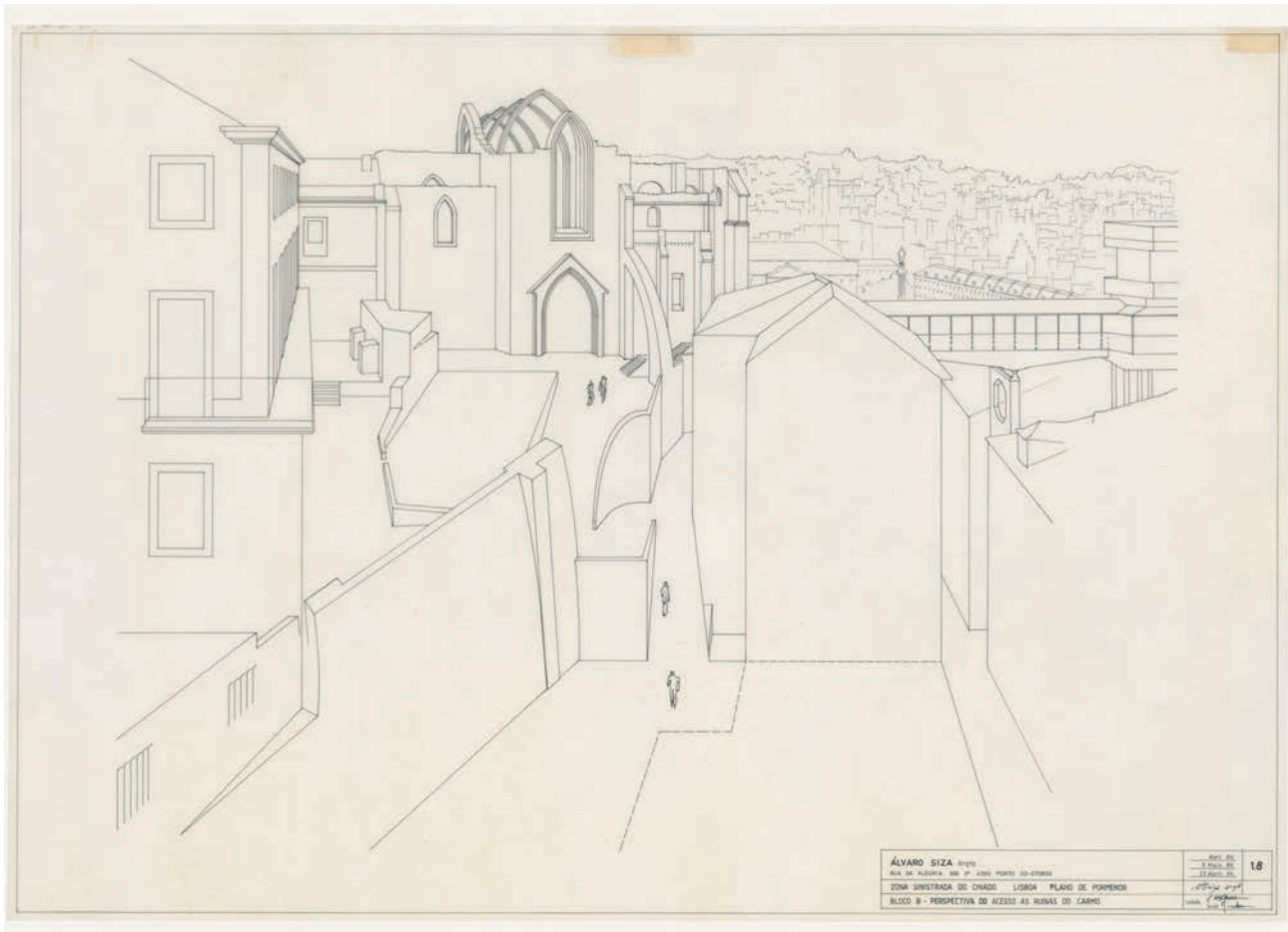
Álvaro Siza, Lisbon, Chiado, Block B. Axonometric exploded view, 1989-1990. The interior of the block between Rua do Carmo, Rua Garrett and Calçada do Sacramento (Block B) was modified by constructing a raised platform divided into a system of ramps and walkways at different heights. Clinging to the existing terraces and to the side of the Palácio Valadares (today Escola Veiga), the ground thus re-defined reaches the southern side of the ruins of the Carmo Church. This has defined a completely different perspective, of a progressive discovery, compared to the direct arrival allowed by the walkway of the Santa Justa Lift.

Álvaro Siza collection - Canadian Center for Architecture - Gift of Álvaro Siza © Álvaro Siza.

formalized in a few, clear and concise points, which nullified any possibilities of interpretation regarding the essential aspects, while leaving a series of possibilities open in other areas. More precisely, as regards the buildings' façades, the indications were quite literal and arrived at a definition of the individual structural and decorative elements, while, as regards the interiors, the owners were free to rely on individual architects who could define how they would be laid out, working within guidelines which permitted variations.

As for the techniques and materials to be used, the plan strictly prescribed the use of that language which was in fact the language of the community, without leaving any room for the voice of the architect designing the project, nor for those who would continue his work. Siza himself commented (1989a, p.71), «Is it all the same? Some people are disappointed: the shop windows are boring, it is said, a bit of modernism is needed. Anyone who looks closer notices the double glazing and other things, especially the people who leave there. Those who live better notice nothing. There is not even a need».

Where the transformation really cut across the epochs of the city was in the new design of the public spaces. Siza defined a new mobility inside the lots, by means of a system of routes which compensated for the differences in height and introduced alternative possibilities of movement with respect to those given by the street network. The integration between the buildings and the public space at the service of the community is one of the more convincing aspects of the project, which makes it an exemplary experience not only from an architectural point of view, but also as a model of urban planning.



**Fig. 5**

Álvaro Siza, Lisbon, Chiado, Block B. Perspective view of the new system of public spaces created in the internal courtyard, 1989-1990.

The design of the pedestrian route inside Block B follows the traces of an ancient system of connections of the medieval settlement, which had been adapted to the topography and had been hidden by the new constructions following the 1755 earthquake.

Álvaro Siza collection - Canadian Center for Architecture - Gift of Álvaro Siza © Álvaro Siza.

This strategy is applied to all of the three blocks involved, named A, B and C. In particular, the intervention inside Block B, recently completed by a system of pedestrian routes which develop in the eastern part with respect to the ruins of the Carmo Convent (*Terraços do Carmo*, Á. Siza and C. Castanheira, 2008-2015) has established a continuous web of relationships, made more dynamic by the different systems to compensate for the differences in height. A testimony of how, twenty years later, disregarding the delays in execution of some parts of the plan, or the modifications introduced for reasons beyond the architectural field, it is possible to follow its urban logic, which took root in the memory as well as historical, archaeological and anthropological investigations which ran in parallel, to verify and confirm an interpretative reading of the project. Occasions of this type were implicit in the original project, whose presuppositions included the possibility of being continued over a long period of time and in a choral perspective.

However, the theme of the pedestrian routes is linked not only to the city's past but also to its future, by adding the design of public transport to the reconstruction plan, in particular that provided by the metro.

In this project, Siza solved the issue of the connexion between physical height differences and temporal differences, allowing the visitor to amble through the various layers of the place's memory, where the traces of the fire are intermingled with those left by the earthquake. A web of perceptual and mental connections which confirms the idea of a city based on relationships, with the fabric seen as a three-dimensional web of geometries and epochs, supporting the implementation and development of a body which is sometimes complex, sometimes not, as opposed to a flat

pattern punctuated by events.

In this game of mirror references between individual and collective work, every dichotomy between invention and authenticity is overcome, to blend in with the coherence of the place.

It is impossible not to recall here the estranging narrative artifice with which José Saramago let one of Fernando Pessoa's heteronyms, Ricardo Reis, wander the streets of Lisbon, as if he had survived his creator for a whole year after his passing. In this multiplication of the self, of the one, in a sort of plural identity, the research of the author and the urban body blend together in a narrative with a continuous tone, giving substance to the fusion between individual and collective memory. In this fixed but at the same time vibrant scene, the author (Saramago J. 2002, p.9) had the opportunity to question himself on the relationship between reality and invention: «The purpose of art is not imitation ... reality does not tolerate its reflection, rather, it rejects it. Only a different reality, whatever it is, may be substituted for the reality one wishes to convey. The difference between them mutually demonstrates, explains, and measures them, reality as the invention it was, invention as the reality that will be».

## Notes

<sup>1</sup> The first part of the recovery plan was presented very swiftly, only eight months after the fire, and its completion came in July 1990. For the complete list of collaborators who took part in the different phases of the project, see the monographic studies listed in the bibliography.

<sup>2</sup> It seems pertinent to point out here the fact that the results of the SAAL operation (*Serviço Ambulatório de Apoio Local*), born within the *Revolução dos Cravos* of 25 April 1974, were re-read by Vittorio Gregotti as a possible alternative to the dichotomy between architecture and conservation in issue 18 of "Lotus International" in 1978, in an article on "Architecture in historic towns". The case of Porto is illustrated in an article by Alexandre Alves Costa on "The Oporto experience", introduced by Gregotti's essay.

<sup>3</sup> Carlotta Torricelli, *L'incontro tra la vita e le forme in architettura. Attualità del pensiero di Távora*, in Távora F. (2021, p. 30)

<sup>4</sup> Siza Á., *Il rapporto tra antico-nuovo in Italia e in Portogallo. Differenze e analogie*, in Reggiani E. (2015, p. 391).

<sup>5</sup> The reference here is to Giorgio Grassi's interpretation of a Henry James story entitled *The Figure in the Carpet*, defining the architect's personal imprint as "that sign of recognition so cleverly, tenaciously disguised." See Grassi G. (1984, p.240).

<sup>6</sup> See Nicolini P. (1997, pp. 7-27).

<sup>7</sup> Barata Fernandes F. and Pinto R. (2001).

<sup>8</sup> This aspect, like that of the reintroduction of certain functions, had a substantial weight in guiding not only the design of the reconstruction but also the legislative system of agreements and compromises between the public and private sectors which were intended to provide the basis on which to carry out the project, also on an economic level.

<sup>9</sup> The Grandella building was constructed in 1891 around an iron and glass framework using an Art Nouveau language based on a project by the architect George Demay, who introduced this new type of department store imported from Paris to the city.

<sup>10</sup> The guide to the city of Lisbon was found in the late 1980s by Portuguese scholars among Pessoa's unpublished writings. The version that was published corresponds to the one written in English in 1925. The first edition came out in Lisbon in 1992.

<sup>11</sup> In this regard, see the exhibition catalogue Tostões A., Rossa W. (eds.) (2008) – *Lisboa 1758. O Plano da Baixa Hoje*, Camara Municipal de Lisboa, Lisbon

<sup>12</sup> See in this regard: França J-A. (1972) – *Una città dell'Illuminismo. La Lisbona del marchese di Pombal*, Officina Edizioni, Rome.

<sup>13</sup> Byrne G. (1987, p.7). The same essay was published in English, dated 1986, in the exhibition catalogue *Alvaro Siza. The Reconstruction of the Chiado, Lisbon*, ICEP,

Gráfica Maiadouro, Porto 1997.

<sup>14</sup> Sebastião José de Carvalho e Melo, future Count of Oeiras and later Marquis of Pombal, a minister of King Joseph I.

<sup>15</sup> The *gaiola*, or cage, is a standardized construction system devised by the Municipal Design Department (*Casa do Risco*). It consists of a wooden structure, similar in many respects to the balloon-frame introduced in Chicago at the beginning of the 20<sup>th</sup> century, which could be quickly erected and then clad in masonry. It boasts proven earthquake resistance.

<sup>16</sup> See in this regard, Siza Á. (1990, pp. 48-55).

<sup>17</sup> See Byrne G. (1989, pp. 32-37). The article appeared in issue 64 of “Lotus International”. The title of the issue is *The other city planning* and it features an introductory essay by Manuel de Solà-Morales, “Another modern tradition. From the break of 1930 to the modern urban project”.

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Gundula Rakowitz  
**Vienna: reconstructing in the in/between**

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Abstract

The changes taking place in Vienna led the city in 2016 to start analysing future scenarios and experimenting design methodologies to draw up a city development plan: *STEP 2025 Urban development Plan Vienna*. The project's thought is nourished by the productive and imaginative force of memory, intervening on a terrain treated not as an inert ground, but as a layered system of signs, traceable and measurable through an operative inventory. The starting point is the *Planungskonzept Wien* elaborated in the years 1958-1961 by Roland Rainer whose ideas for the city of Vienna are incredibly current, and just as unexpected is the absolutely sustainable vocation that the same plan for reconstruction reveals. The plan is proposed as a valid tool to face future challenges for the city.

Keywords

Reconstruction – Vienna – Zeitraum

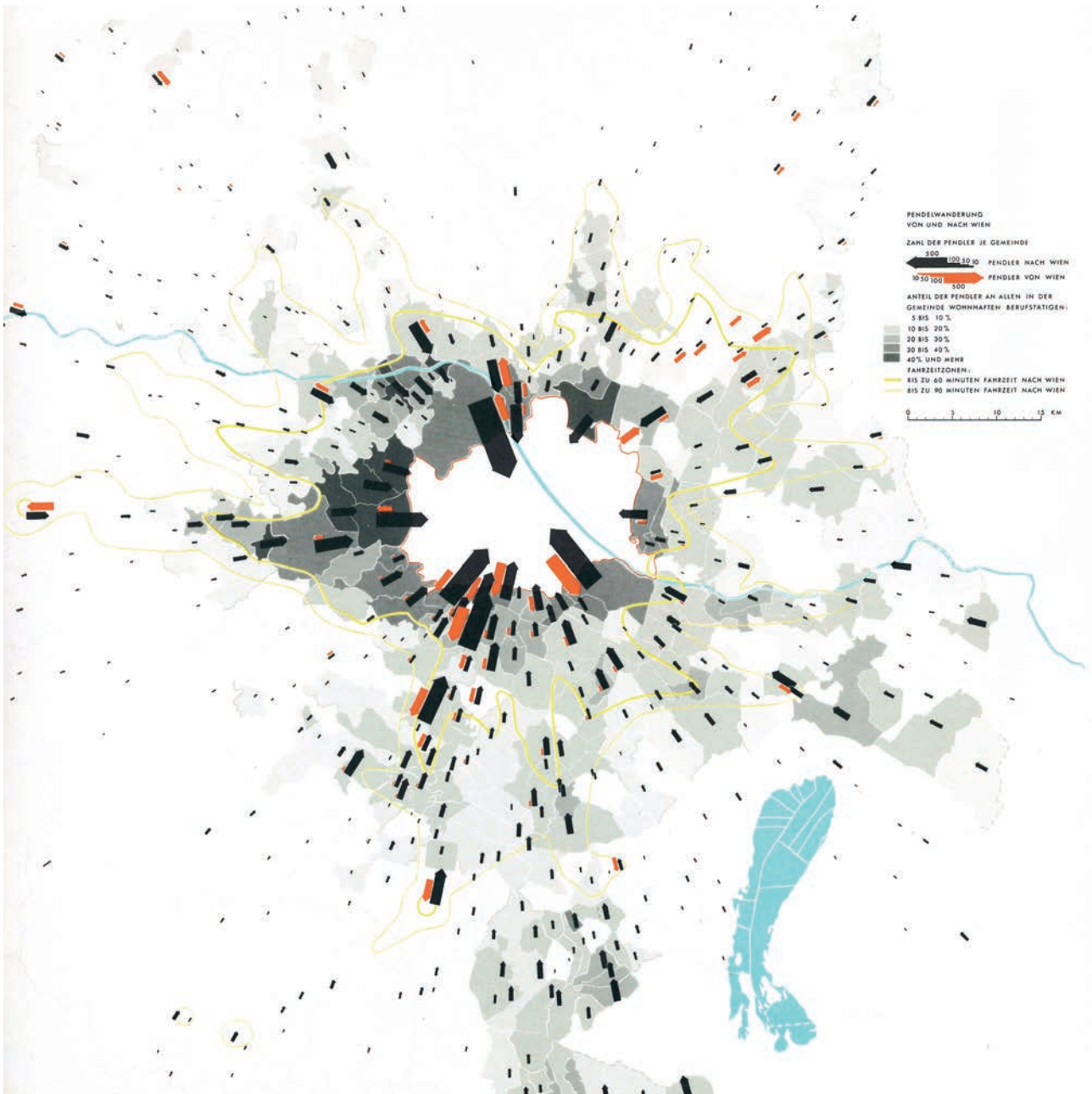
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The case study is the city of Vienna starting from the experience of Roland Rainer and his reconstruction plan, the *Planungskonzept Wien* drawn up in the years 1958-1961. To this investigation it is necessary to premise some general reflections<sup>1</sup>.

In this regard, an initial reflection on the concept of heritage seems relevant, if not unavoidable. In fact, its twofold, a pervasive, extensive element, and as an intensive element. In other words, as a material or immaterial notion, or as a straightforward design concept. The latter seems to me to exceed its qualification in terms of value – whether understood on the symbolic plane or even on economic and functional ones linked to a judicial adjustment of the reconstruction processes<sup>2</sup>.

This involves rethinking the statute of the project, its “theory”, which must integrate its own internal narrative elements that do not naively assume a “bare” subject, but one already saturated with tensions between the real and the inauthentic, the given and innovation. It is possible to understand that the narration as re-construction – the re-construction as narration – is not supported by any natural chronology, there does not exist any “before” or an “after”, but re-construction through fragments or ruins, and as such it does not beg the question as to an impossible recapturing of the origin, but a catastrophe, i.e., quite literally, a turning point. We reactivate places of mind-memory, “paradigms” of transformation, and this is what allows us to re-discover and re-build places, while re-bolstering critical thinking, crisis thinking.

In the thought of reconstruction, the destruction/construction link should be placed at the centre and investigated, the Cartesian link between *pars destruens* and *pars construens*, but always as two sides of the architectural



**Fig. 1**  
 Roland Rainer, Pendelwanderung von und nach Wien / Commuting to and from Vienna, from *Planungskonzept Wien*, 1962.



**Fig. 2**  
 Roland Rainer, Einzugsgebiet  
 der Mittelschulen / Catchment  
 area of middle and high schools,  
 from *Planungskonzept Wien*,  
 1962

structural method (from the incisive Latin verb *struere*). Demolition is a choice that is, so to speak, not trivially conservative: it destroys in line with a project, to re-construct in line with a project. And it is here that the theme of scale is again at stake, in a simultaneous multi-scale dimension that allows the composition of plural and provisional identities that can always be reconstructed.

And reconstruct according to an inventory. It seems to me that the theme of the operational inventory (together with those of atlases and archives) needs to be reread starting from its qualification as a site of available inventions, of inventions for design but without complying with the given order of inventive materials, playing on the simultaneous possibility of inventory units, hence the possibility of differences that become modular, exerting an imaginative capacity that can play on the mobile material of inventive flows.

Giorgio Agamben has traced a critical path of the difference between the paradigm of the work, invention, and structure, as well as the paradigm of creation, writing that “it is from this paradigm that the reckless transposition comes of the theological vocabulary of creation to the activity of the artist, which until then nobody had dreamed of defining creative”<sup>3</sup>. It is significant – notes Agamben – that «it is the practice of the architect which has played a decisive role in the processing of this paradigm [of creation]» and that therefore «those who practise architecture should perhaps be particularly cautious when reflecting on their practice; both the centrality and the problematic nature of the ‘project’ concept should be considered from this perspective»<sup>4</sup>.

The – wrong – language of creativity refers *ex negativo* to an absence of the past a vacuum or oblivion, which is not conserved as such in the individual and collective memory: memory is not a passive conservation of a vacuum but a transformation or change of form, the production of scales, or paradigms of shared values: values of an iconic, meta-historical, and symbolic nature.

Memory is selective, it makes a choice from within a broad spectrum of possible flows. This is why memory is alive, it is living matter, and that is why project timeframes have long lead times that are fragmented and non-linear.

What holds them together is the subjective component of the architect’s civil commitment, his or her ability to “answer...”, to be ultimately responsible in the face of social – collective – use or utility. Being responsible does not mean a generic reference to a moral code for individuals, but to a code of ethics, with respect to which architecture presents itself as a *discipline* in the strongest sense, a set of operational rules or, better, of *principles*. The theme of reconstruction demands a rethink of the disciplinary regulations of architecture today: to be able to ask questions and pose problems, knowing how to interrogate architecture repeatedly. In some way, constantly starting again from the top, a re-founding and changing reconstruction, at the same time appropriate to the principles of the discipline, a relating of the operational dialogical procedures, knowledge, and plural competencies: a reality thought through, a planned utopia.

We make projects, we make drawings, we translate seeking expressive forms. Up to that point a critical awareness is acting, of the limits of “our” language or languages, which often, more than speaking are “spoken”, merely reproducing the spell of the method and the block of the research. To recall Jacques Derrida, «Architecture *is without being* in the project».

We must therefore ask the architect the question of «support or substance... of the *sujet*, of what is cast beneath. But also, of what is cast forward or in advance in the project (projection, programme, prescription, promise, proposition), everything that belongs to the architectural process, to the movement of launching or being launched, of casting or being cast»<sup>5</sup>.

I would like to recall the case of Vienna from the experience of Roland Rainer and his *Planungskonzept Wien* drawn up in the years 1958-1961<sup>6</sup>. After the war Rainer was called by the Municipality of Vienna to cover the charge of *Wiener Stadtplaner*, director of the Department of Urban Planning<sup>7</sup>. In this position, he undertook to rebuild the Vienna that had been destroyed. Through a new urban plan, he found himself having to cope just after the war with reconstruction of the city as well as a population increase.

Like the rest of Austria, Vienna was occupied by the Allies for ten years after the end of WWII in 1945, and only in 1955 thanks to the *Staatsvertrag* did it become an autonomous neutral republic. The political changes in Europe subsequently brought Vienna to a prime geopolitical position: from a peripheral location near the Iron Curtain to a central one close to the rapid growth of the Eastern Europe markets. The entire metropolitan area is currently growing, and the city needs to respond to social, technical, environmental and geopolitical demands.

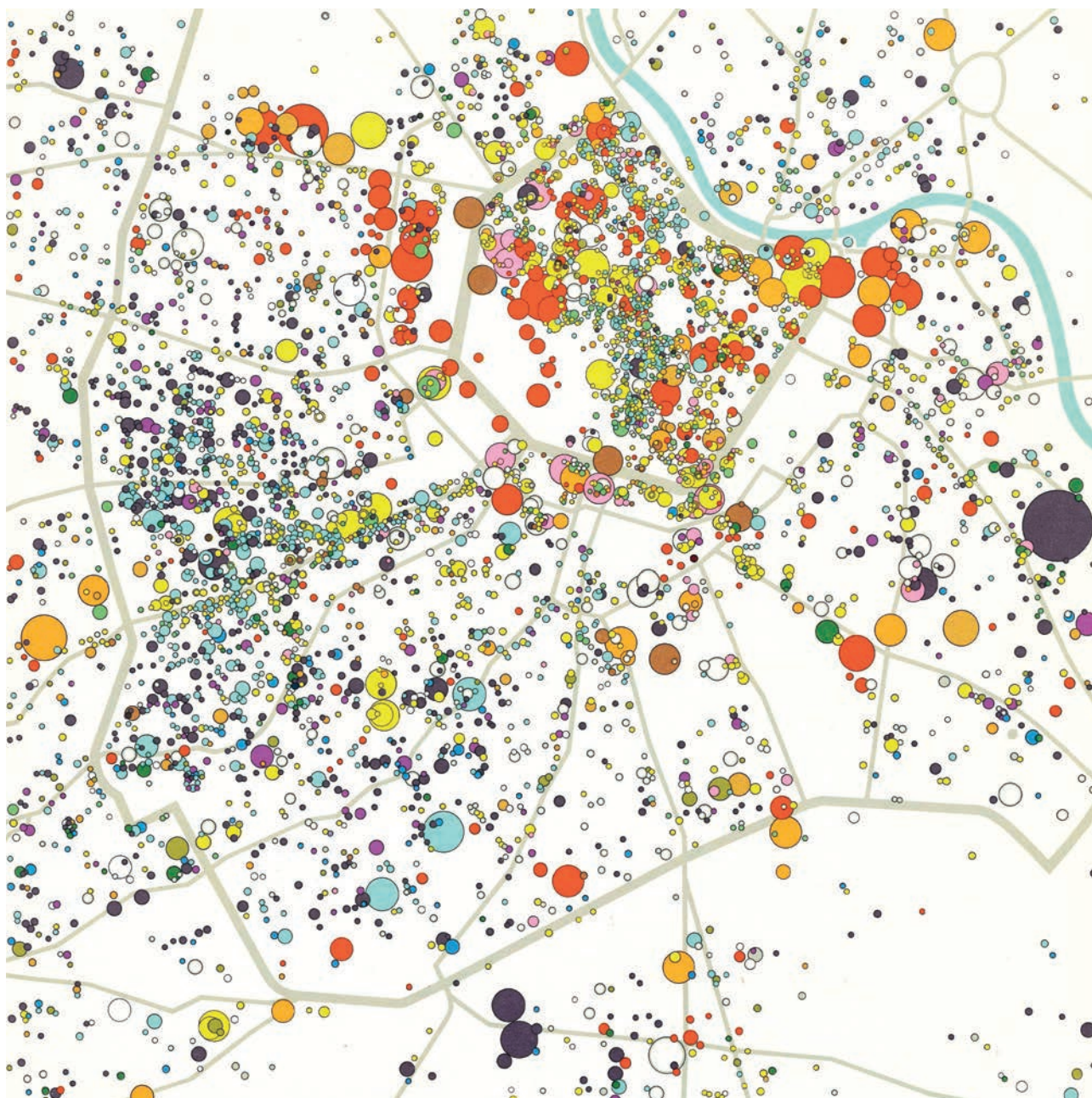
Vienna with its characteristic as a nodal Central European city, has always been one of the first points of contact in the European East-West diaphragm, thanks also to the Danube Corridor between Vienna, Bratislava, and Budapest. Today, Vienna lends itself to being a city that is nomadic and sedentary at the same time, a city of passage due to its location and a well-to-do city, with a strong presence of parks and gardens, an efficient infrastructure network, individual and social services, cultural initiatives and the management and the use of public space, as well as the radiance of the 19th-century spaces.

How to cope with population growth and the consequent expansion of the city, while considering the flows that the ambitious new Central Station project, amongst the largest in Europe, could attract?

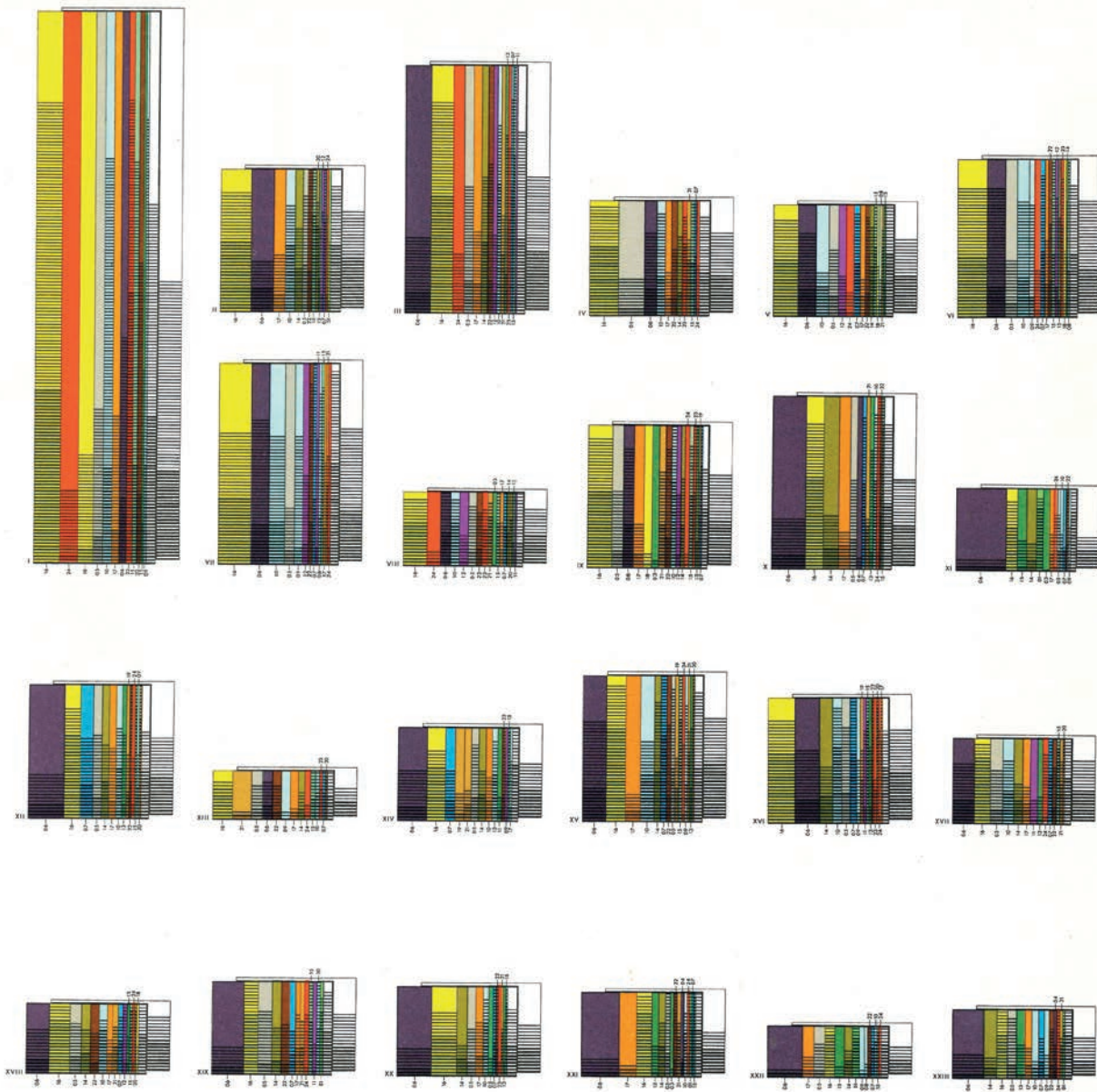
We can try to answer these questions by following two different routes. If, on the one hand, we look at the work of Roland Rainer<sup>8</sup>, as a tool of departure to answer the urban-architectural issues raised in these years by the city, on the other, through potential case studies of multi-scale design experiences, we can seek to actualize this thinking and apply it to the problems that Vienna needs to cope with today. The economic crisis and the burning issues of the migratory flows crossing Europe force us to question ourselves in this sense.

It is interesting to note that Rainer's thought regarding the city of Vienna is incredibly up-to-date, while equally unexpected is the sustainable vocation that the reconstruction plan reveals. Rainer focused particularly on thinking of guidelines for any "green corridors" that penetrate to the heart of the city as well as the maintenance of wooded areas and urban parks. In addition to developing the infrastructure, also the aspect of urban development was thought out in detail. To this end, Rainer identified areas to the north east of the city as potential areas for expansion. His design proposal, his *Planungskonzept*, is based on an accurate and detailed study of the existing conditions, which includes graphic representations with different analytical texts<sup>9</sup>.

However, the proposal to realize Rainer's *Planungskonzept*, while voted



**Fig. 3**  
Roland Rainer, Arbeitsstätten in  
Wien / Workplaces in Vienna, from  
*Planungskonzept Wien*, 1962



**BETRIEBSSTRUKTUR NACH BEZIRKEN**

DIE FLÄCHEN STELLEN DIE ZAHL DER BESCHÄFTIGTEN JE BEZIRK DAR. DIE SENKRECHTEN, VERSCHIEDENFARBIGEN STREIFEN KENNZEICHNEN DEN ANTEIL DER EINZELNEN BETRIEBSKLASSEN AN DER ZAHL DER BESCHÄFTIGTEN. ES WERDEN FOLGENDE BETRIEBSKLASSEN UNTERSCHIEDEN:

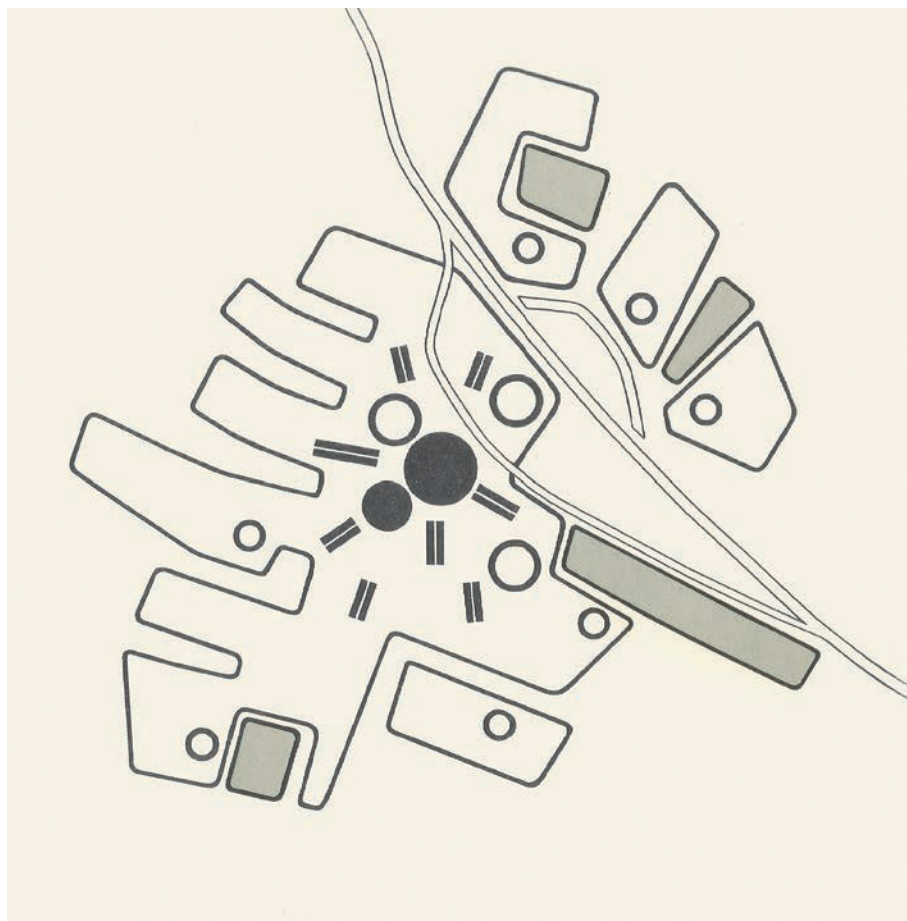
- 01 LANDWIRTSCHAFT
- 02 BERGBAU
- 03 GAS- UND FERNEHEIZWERKE
- 04 STEIN- UND ERDGEWINNUNG UND -BEARBEITUNG, GLASHERSTELLUNG
- 05 BAUWESEN UND BAUHALFBETRIEBE
- 06 EISEN- UND METALLERZEUGNIS- UND -BEARBEITUNG
- 07 HOLZBEREITUNG
- 08 LEGERERZEUGNIS- UND -BEARBEITUNG
- 09 TEXTILBETRIEBE
- 10 BEKLEIDUNGSBETRIEBE
- 11 PAPIERERZEUGNIS- UND -BEARBEITUNG
- 12 GRAFISCHE BETRIEBE
- 13 CHEMISCHE PRODUKTION
- 14 NÄHRMISCH- UND GENUSSMITTELBETRIEBE
- 15 HOTEL-, GAST- UND SCHANKBETRIEBE
- 16 HANDEL
- 17 VERKEHR
- 18 GELDWESEN, PRIVATVERSICHERUNG
- 19 REINIGUNGSWESEN
- 20 KÖRPERPFLEGE
- 21 GESUNDHEITSWESEN
- 22 BILDUNG, KUNST, UNTERHALTUNG
- 23 RECHTS- UND WIRTSCHAFTSBERATUNG
- 24 VERWALTUNG ÖFFENTLICHER DIENSTE

INNEHALB JEDER BETRIEBSKLASSE WIRD DIE GÜTERGRUPPE IN BETRIEBE VERSCHIEDENER BESCHÄFTIGTENZAHL DARGESTELLT

- über 300
- 100-300
- 50-100
- 1-50 UNBESCHÄFTIGTE

AN RECHTEN RANDE JEDES DIAGRAMMES WIRD DIE GLEDERUNG ALLER IM BEZIRK BEFINDLICHEN BETRIEBE NACH DER BESCHÄFTIGTENZAHL DARGESTELLT.

**Fig. 4**  
 Roland Rainer, Betriebsstruktur nach Bezirken / Corporate structure by district, from *Planungskonzept Wien*, 1962



- City attuale
- City progettata
- Centri esterni
- Strade commerciali
- ▭ Aree industriali essenziali
- ▭ Aree residenziali
- Parchi storici importanti
- △△△ Aree boschive del Wienerwald
- Aree boschive dell'Auwald
- ▨▨▨ Rimboscimenti
- Cunei verdi essenziali
- Corridoi verdi essenziali
- Aree agricole



**Fig. 5**  
Roland Rainer, Gliederungsschema / Joint diagram, from *Planungskonzept Wien*, 1962.

**Fig. 6**  
Roland Rainer, Grünflächenschema / Green area scheme, from *Planungskonzept Wien*, 1962.



play if Rainer's plan had been realized? Or again: why is that the *Stadtentwicklungsplan Wien STEP 2025* seems to return to some key points of Rainer's *Planungskonzept*? In other words: why are we starting today from Rainer's post-war plan for the reconstruction of Vienna to design its future urban development? What choices are we making? In the perspective of a growth of the urban population of Vienna well over two million people, and therefore of the radical and inevitable transformations that this entails, it is inevitable to ask whether Rainer's design choices can still be considered effective.

Rainer had developed a practical and theoretical project to reconstruct the city from its ruins: the theory was neatly interwoven with the practice, with the doing. The important thing to note is that Rainer took as his starting point a topological morphological study that encroached on the geographic dimension. In his plan to reconstruct the city its morphology played a key role, was a priority. Here the architect *translates* more than *expresses*, uses – we could say with a term to be added to the lexicon of the inventory – *scalar morphologies*, in an incessant bobbin movement, backwards and forwards: an unfinished work like the material being worked.

This observation leads us to the radical question of the actions to be taken in terms of reconstruction. This question requires that reflection be displaced from the investigation around the objects of our studies to the problem of the *object* of architecture itself, in order to reconstruct a critical distance, without automatically obeying the order, the sequence of discourse, but focusing on relationships, on the possible links.

In other words, we are faced with the unavoidable need to think again the *Zwischenraum*, the space in-between things capable of uniting or suspending, removing the rhetoric of objectuality that architectural debate focuses on today<sup>10</sup>. By composing the thought of the “space in-between”, *Zwischenraum*, with the thought of the “time in the middle,” of the “intra/time” of *Zwischenzeit*, we can demolish by designing the temporal fixity of the objects which in their singularity are the protagonists in our cities.

## Notes

<sup>1</sup> See G. RAKOWITZ, C. TORRICELLI, edited by, *Ricostruzione Inventario progetto / Reconstruction Inventory Project*, Poligrafo, Padova, 2018, in particular pp. 110-131.

<sup>2</sup> See C. MAGNANI, *Introduction. Reconstruction: a mental space?*, in G. RAKOWITZ, C. TORRICELLI, edited by, *Ricostruzione Inventario progetto*, cit., pp. 10-17.

<sup>3</sup> Agamben has shown that the idea that art does not reside in the work but in the mind of the artist and has a theological matrix that finds its proper formulation in Thomas' analogy between the house that pre-exists in the architect's mind, and the divine creation of the world according to the model or idea in his or her mind. See G. AGAMBEN, *Creazione e anarchia. L'opera nell'età della religione capitalista*, Vicenza, Neri Pozza, 2017, p. 19.

<sup>4</sup> G. AGAMBEN, *Creazione e anarchia*, op. cit., ibid.

<sup>5</sup> Thus J. DERRIDA, *Psyché. Invention de l'Autre*, Paris, Éditions Galilée, 1987.

<sup>6</sup> The work of Roland Rainer in profoundly rethinking the city of Vienna can be found in the volume: R. RAINER, *Planungskonzept Wien*, Wien, Jugend & Volk, 1962.

<sup>7</sup> And nevertheless Rainer being a member of the NSDAP during the Nazi period: see the exhibition titled *Roland Rainer - (Un)Umstritten: Neue Erkenntnisse zum Werk (1936-1963)*, edited by I. Holzschuh, M. Platzer e W. Indrist, 20 October - 10 December 2018, Architekturzentrum Wien AzW. The exhibition is the result of a research project that began with the acquisition of the Roland Rainer fund by AzW in 2015 to

gain for the first time a more specific view of Rainer's work during National Socialism. Rainer himself did not want this period to be remembered, as he himself dropped works and texts from this stage in his life.

<sup>8</sup> See R. RAINER, *An den Rand geschrieben. Wohnkultur - Stadtkultur*, Wien Köln Weimar, Böhlau, 2000.

<sup>9</sup> Recalling some graphic representations and texts: from *Bevölkerungsentwicklung im Raume Wien 1869-1951*, to *Pendelwanderung, Bevölkerungsdichte, Wohnbevölkerung und Berufstätige, Arbeitsstätten, Betriebsstruktur nach Bezirken, Zentrale Einrichtungen, Einzugsbereiche der Mittelschulen, Versorgungsleitungen Wien-Umland, Flächennutzung, Flächenwidmung, Verkehr, Bebauung, Stadtbild und Denkmalschutz* ecc.

<sup>10</sup> Regarding the link between *Zwischenraum* and *Zwischenzeit*, see: G. SIMMEL, *Brücke und Tür*, in "Der Tag. Modern illustrierte Zeitung", 683, Berlin 1909, pp. 1-3, now in Idem, *Brücke und Tür. Essays des Philosophen zur Geschichte, Religion, Kunst und Gesellschaft*, im Verein mit M. Susman, edited by M. Landmann, Stuttgart, Koehler, 1957. See also R. KOSELLECK, *Vergangene Zukunft. Zur Semantik geschichtlicher Zeiten*, Frankfurt, a.M., Suhrkamp, 1979. See also the third volume of the series *Wege der Kulturforschung*, edited by U. WIRTH and V. SELLIER, *Bewegen im Zwischenraum*, Berlin, Kulturverlag Kadmos, 2012.

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Tommaso Lolli

## The case of Mosul. Between urban reading and reconstruction

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### Abstract

The interest that can spring from an urban study on Mosul and from a reflection on its reconstruction does not lie in the definition of specific and local solutions, due to the emergency state in which the city lies, but rather in the possibility of operating a disciplinary self-interrogation on the needs imposed by the same process of reconstruction, to be understood neither as a temporary solution nor as an apology for reiteration or restoration. The reading we wish to propose is to include destruction (and consequent reconstruction) in the processes proper to the *dynamics* of cities, and therefore to promote a study of the same dynamics from which to deduce typical generative processes. Therefore, starting from a study of the context, a critical reading, up to the formation of an appropriate vocabulary, we will analyse some ways of approaching urban reconstruction through procedural and design references.

### Keywords

Mosul — Architectural reading — Urban reconstruction

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The term *re*-construction carries in its etymological root enough evocative power to define without further specification what its role is in urban contexts subject to traumatic events such as natural disasters or wars, i.e. the re-planning of destroyed parts of the city, accompanied by the consequent evaluation of the project or strategy proposed as its replacement. However, the prefix *re*- may be susceptible to an iterative and/or duplicative interpretation that is not necessarily included within such a process; instead, a path could hopefully be traced that deepens the theme of reconstruction in a more veiled and less etymologically punctual way than a reconstruction *as it was, where it was*.

«Thus, the images, engravings and photographs of disembowelment offer us this vision; destruction and disembowelment, expropriation and abrupt changes in land use [...] are among the best known means of urban dynamics», writes Aldo Rossi (1966, p. 14); and this statement, despite its apparent recklessness, suggests how the process of destruction – and consequently of *re*-construction – can be ascribed to the processes of a city's *dynamics*, of its change – as much as earthquakes and other catastrophic events. Assuming, thus, reconstruction to be an evolutionary component of the urban fabric, a new interpretation is derived, which also opens up the possibility of modifying the forms and functions by the reconstructive project; rebuilding is therefore configured as the project of the *new* within an already existing urban fabric, historically and morphologically recognisable. Once the alterity with respect to the urban context has been ascertained, it will then be the project's task to respond to certain needs for integration, recognisability and consonance, without neglecting the technical adaptation of structures, roads and any changes in the way of life

imposed by the normal flow of time.

The knowledge of the context becomes therefore a necessary tool to operate in a conscious way and to understand the generative logic of the project area, in order to intervene with a confirming and/or oppositional dialectic with respect to the urban morphology. Since we are dealing with architecture – and more specifically with architectural design – knowledge of the context comes mainly from a study of history, considered here, however, in its synchronic vision, as a repertoire of forms and solutions, witnesses of habitual settlement modes. A repertoire of forms and solutions that, from a disorderly arrangement, needs to be categorised and classified in order to become an operational tool, through architecture's most proper categorisation device – the type – which, from this point of view, turns out to be the *decipherable code* for understanding and deepening history. «The classificatory characteristics of type can only be a provisional step towards a structuring of thoughts: classification cannot also be the result»<sup>1</sup>. The type, therefore, understood as a means, as a typological series of transformations, appears to be the most precise reading strategy for linking the structure of a city to its overall morphology and for grasping its various peculiarities and modifications; the type as an abstract category of «equality, similarity or affinity»<sup>2</sup> or of their opposites represents the possibility of an elastic set of categories that allows the identification of *homogeneous fields*. Consequently, all the categorizable qualities of architecture can be ascribed to type: in addition to the planimetric layout, all other geometric properties of a building are included – starting from the consideration that a section can be categorised in the same way as a plan, referring here to Colin Rowe's (1999) vision of a building as a dice thrown on the table<sup>3</sup> – but also «each of the various aspects of a configuration: including the generators of spaces, surfaces and their treatments, construction details, decorative elements, and – this is very important – the ways in which spaces are experienced or, in other words, how spaces become places: three-dimensional events that stimulate social events» (De Carlo 1985, p. 46). These preliminary operations allow the drafting of a *vocabulary* to refer to, that permits the organisation of urban facts into ecosystems that are autonomous in their recognisability and urban role.

In this respect, the city of Mosul is a case study considerably less explored than other Islamic contexts in North Africa or the Middle East, since it has not been subject of studies aimed at an overall investigation – and restitution – of the urban structure.

The historical sources on Mosul mostly concern colonial cartography and the description of some superficial urban aspects and the customs of the inhabitants, noted in travel diaries to the East, as was the custom in nineteenth-century Europe.<sup>4</sup> An important exception is represented by the volumes of the German archaeologist Ernst Hertzfeld (1920), who deals in depth with the survey of some of the city's monuments and urban structures such as the defensive perimeter walls. Contemporary sources, on the other hand, mention Mosul and its history, but without investigating in depth its specificity. Nonetheless, by bringing together the information and proceeding by contrast and affinity with other cases, it is considered admissible to hypothesise an intervention strategy based on the identification of a number of urban facts that are substantially homogeneous in order to be considered as self-sufficient reference systems.

At the methodological level, it was considered legitimate to identify some urban facts that seemed to present an identity in themselves, far beyond the



**Fig. 1**

Plan of Mosul based on the cartographic survey drawn up by Felix Jones in 1848. In evidence the wall system, historically protected by a water moat and the main internal connection route. In black the main Mosque of Al Nouri, in dark gray the Souk. (Drawing by the author).

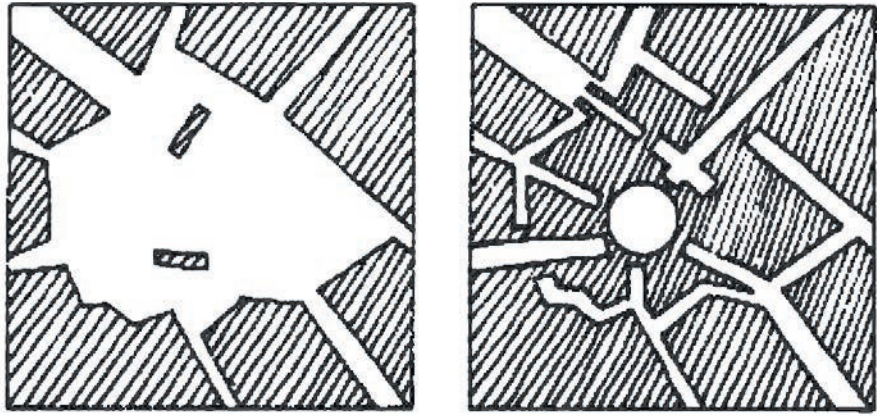
mere architectural body: these are devices, memories, real urban attitudes that make up the history of Mosul and its ways of life, thus becoming part of the city's identity itself and, as such, a possible point of emphasis for the analysis of the city (Fig. 1). The first system examined is the axis that connects the main historical entrance to the city, *Bab Sindjar*, with the pontoon bridge, historically a strategic point for crossing the Tigris River. The main Mosque of Al Nouri (to which the well-known Al-Hadba minaret was attached), the Suq as well as other numerous notable buildings are scattered along this axis; it is therefore reasonable to imagine that this axis was home to a high concentration of accessory services, institutions and places central to the liveability of the urban core. The second isolated system, on the other hand, is the complex mechanism of the perimeter walls of the city of Mosul, a feature that has strongly identified the city throughout history – as evidenced by the variety of representations that have been made of the walls – and paradoxically ended in a very western solution such as conversion into a traffic ring. The walls, in addition to being themselves representative of the most widespread settlement archetype in the Islamic world, the enclosure, play an important identity role: both externally – as the basis of the parallaxic and oppositional relationship with the city of Nineveh, a very frequent dynamic of urban growth in the Islamic world (Cuneo 1986) – and internally, assuming different configurations – topographically in relief, open on the river, integrated with the Suq and the city gates – so as to be occasionally detectable even in the residential fabric. The two systems shown here exemplify what may be an initial selection strategy for the city, its reading by compatible and similar areas; the identification of matrices and traces of identity to connect with, and from which to deduce generative structures and mechanisms. In a historical period in which it is necessary to decide priorities before intervening with the reconstruction of buildings, these systems can serve as *leitmotifs* for the location of punctual, thematic and highly symbolic interventions, which



**Fig. 2**  
Urban axis considered in the project proposed by Stefano Bianca for Baghdad. (Bianca 2000).

have the dual objective of both interpreting the city's own formal logic and being containers and propulsors of significant and public functions that aspire to the restitution of an optimistic scenario for the future. Should it be necessary, we specify the non-uniqueness of the selection, leaving open the possibility of recognising new and different urban systems that might respond equivalently to the – necessarily hypothetical – approach strategy proposed here.

In a continuous cross-reference with the city of Baghdad, and especially with the historical settlement of Rusafa – which will prove to be of extreme importance at a methodological level due to the aforementioned need for parallels – it is considered useful to compare the previous strategic reading with the design operations proposed for the Iraqi capital by Stefano Bianca, in which, after the preparation of an overall structural plan, the study of more specific plans is hypothesised: while on the one hand a “passive control” over the residential fabric is foreseen – therefore the endowment of a cautelative urban regulation for private interventions – on the other hand, “active” interventions of architectural design, linked precisely by belonging to coherent and recognisable systems, as in the case represented by the street that connects the Tigris river to the sanctuary of Gaylani (Fig. 2). While the theme of reconstruction has been introduced from a strategic point of view, it must now be acknowledged that destruction due to a traumatic event – war and/or natural catastrophes – raises specific questions compared to other types of reconstruction. Recalling Aldo Rossi's above-mentioned statement, between expropriations (or, similarly, *brownfield* interventions) and post-traumatic reconstructions there is a question linked to the identity and symbols in which a population can recognise itself. Assuming as possible a comparison between the European situation after the Second World War and the current situation in the Middle East, some reflections of Rob Krier open a strand of morphological studies on the reconstruction of a city according to the existing spatial dynamics: «Par-



**Fig. 3**  
Scheme that opens the chapter “Ricostruzione di spazi urbani distrutti”. (Krier 1982).

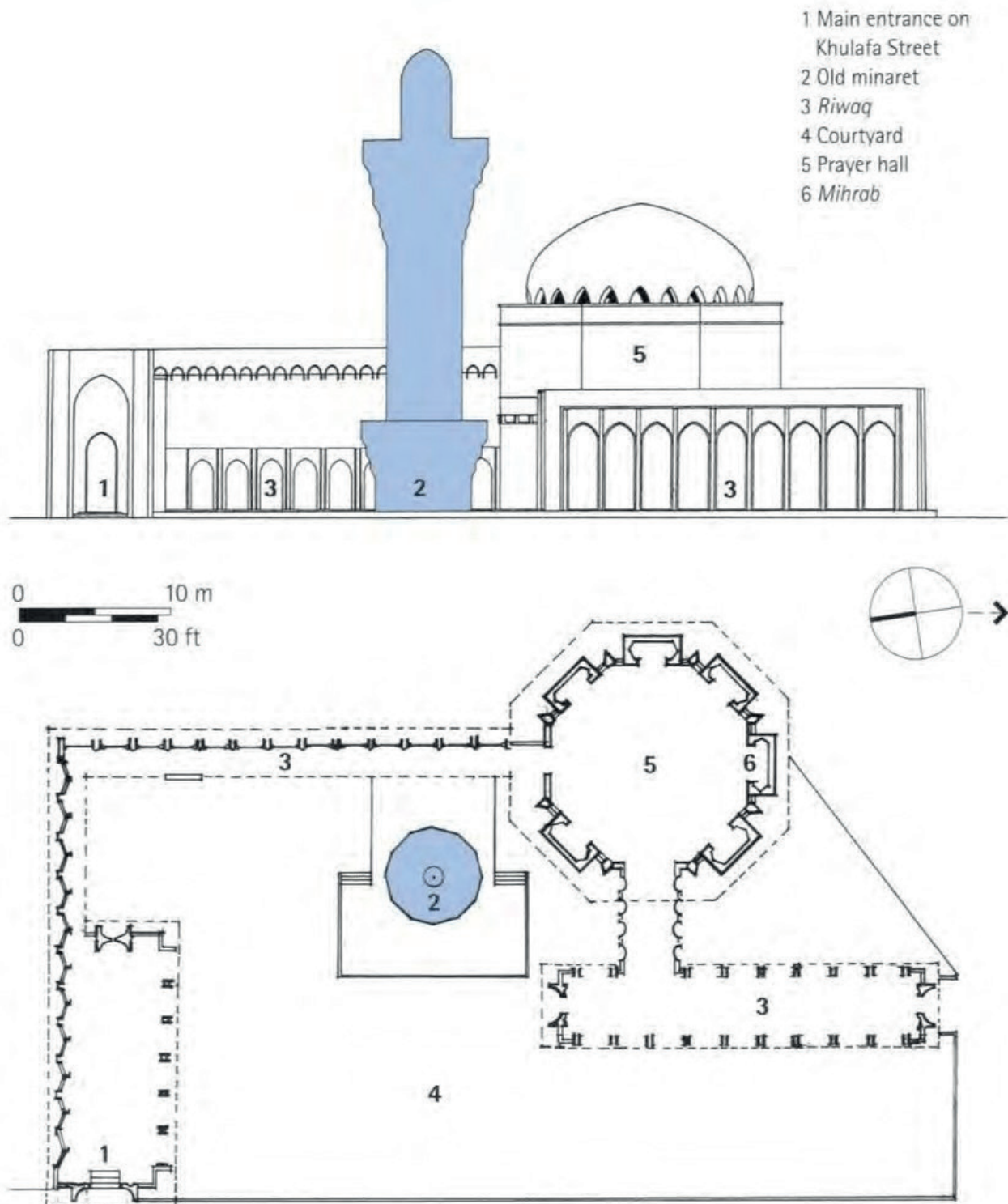
particular attention is paid in these studies to restoring the continuity of spatial experience within an urban context. I have designed streets and squares for the pedestrian, harmonised as closely as possible with the existing structure and showing the utmost consideration for the legacy of the past» (Krier 1982, p. 140), studies brilliantly summarised in the image attached to the beginning of the chapter in which the subject is discussed (Fig. 3). In his polemic against the urbanistic dream of “naive functionalism”, Krier accentuates the importance of spatial considerations – the term “tailoring” adequately indicates the objective – and at the same time does not preclude the technical adjustments necessary for the city to continue functioning.<sup>5</sup> What we would like to add, here, is to underline the importance of considering also the symbolic, evocative and representative character of buildings in addition to their morphological correspondence, especially when the original depositaries of these values, the destroyed buildings, disappear in a traumatic way.

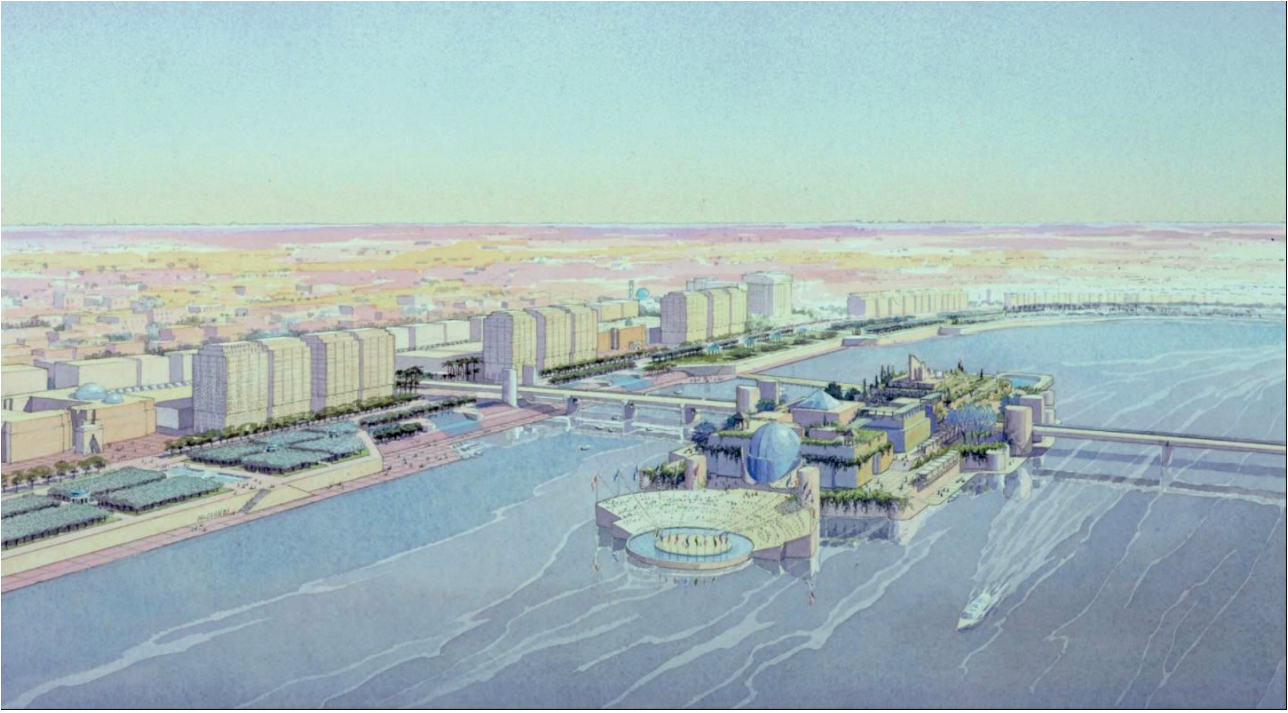
In the Islamic context, in which form clearly prevails over function – it could be enough to recall the spread of introverted courtyard types in mosques, madrasas and residential buildings – and in which a precise articulation of *social patterns* (Bianca 2000) identifies the ways in which buildings are used, the symbolic importance of the construction, the layout and the choice of location become extremely important variables in the reading – and writing – of architecture.

Just as Hassan Fathy’s work seeks to update the linguistic and constructive characteristics of the Islamic tradition,<sup>6</sup> and Fernand Pouillon’s work proposes a renewed interpretation of the relationship between built environment and open space at the settlement level,<sup>7</sup> there are many projects, both well or less known, that deal with aspects of this complexity. We would now like to propose two case studies that, despite their conceptual distance, address the question of identifying a possible balance between recognisability and change, which could be translated in “roweian” terms as the dialectic between the *theatre of memory* and the *theatre of prophecy*: on the one hand, the project for the Khulafa mosque by Mohamed Makiya (1960) and, on the other, the project for the Abu Nawas riverfront by Arthur Erickson (1981). Both, although in opposite ways, represent the bivalent desire to enhance the existing architectural heritage, while at the same time allowing the urban fabric to accommodate, with its forms, the change in lifestyles. The Khulafa Mosque project by Makiya (Fig. 4) deals with the construction of a new religious building on the site of a 10th century Abbasid mosque, of which only the minaret of Suq Al Ghazl remained as historical evidence. The project takes the minaret as the central focus

**Fig. 4**

Mohamed Makiya's Khulafa Mosque Project (Hasan 2015).





**Fig. 5**  
Arthur Erickson's Abu Nawas  
Long River Project (Ditmars  
2016).

of the new mosque and provides the displacement of the new buildings around it. What is interesting, apart from the operation of enhancing the minaret and the building's language and construction, is the positioning of the new buildings themselves: the three *riwaqs* (porticoes) link the space with the prayer dome and form a background for the minaret, but they also open onto the city, generating a progressive series of thresholds mediating between the street and the interior of the dome, thus opening up – albeit in a calibrated, gradual way – the introversion typical of Islamic places of worship. The project, despite its perhaps compressed dimensional proportions,<sup>8</sup> remains interesting for its attempt to reach a compromise between integration with history and openness to typological deformation. On the other hand, instead of an intimate and measured project, there is a colossal proposal, requested in its imaginative dimension by Saddam Hussein himself at the beginning of the 1980s, with the intention of restoring Baghdad to the splendour of the Abbasid era: the project (Fig. 5) involves the renovation of approximately 3km of riverfront and the insertion of a bridge that would cross an artificial island.<sup>9</sup> Trying to refrain from value judgments, we want instead to emphasise the relationship of force operated on the surrounding city. Promoted not only by the political class but also by important architects such as Rifat Chadirji, the intervention conveys values attributable more to the world of symbols than to content: the need to integrate the function park with new uses, new possibilities and the awareness that, just as in the West we speak of the risk of musealisation, the Islamic city too will face the need to generate new visions.

With all due caution regarding parallels, writing about Mosul involves a necessary theoretical oscillation in a constellation made up of references, affinities and divergences with histories that are, at least partially, similar. The text proposed here, far from identifying a univocal design solution to reconstruction, prefers a critical and exploratory look at certain dynamics from which to dialectically draw some problematic questions. While the text has often spoken of *reading* an architecture (or a piece of city), perhaps the conclusion is that, with the same degree of allusiveness, the city and

architecture can also be *written*, and in this specific case – using the same caution for the prefix *re-* adopted at the beginning – even rewritten. This is a very evocative operation, as complex as it is technically to describe in detail, but it offers valuable methodological indications when dealing with design themes: the reading of a text, its comprehension and the use of its internal rules for its continuation or integration. Identifying minimum characters, *traits*, which can have a reconnaissance-insiemistic but also an operational value. Is an operation contrary to Queneau's *Exercices in Style* possible? Instead of writing the same episode a hundred times with different words, could we write a hundred different architectures with the same “words”, after having structured our own, adequate vocabulary? The fact that the design processes of architecture may include an affinity with linguistic processes opens up interesting interpretations and considerations, stimulating new and further reflection on both the communicative and strictly syntactic value of the concordance of the internal terms of a proposition. The question is obviously wide and fraught with obstacles, what we have wanted to propose here is more of a problematic reading and initial hypotheses of approach to the reconstructive question, hoping to be able to make a contribution, albeit collateral and partial, to the definition of a broader scenario overall, if not to the expansion of the scenario itself.

## Notes

<sup>1</sup> Ungers, O. M., in Casabella 1985, p. 92

<sup>2</sup> Schweighofer, A., in Casabella 1985, p. 97

<sup>3</sup> « ‘The floor which is really a horizontal wall’. Throwaway remark though this might be, it is, just possibly, Le Corbusier's most rewarding observation. For, if walls become floors, then sections become plans; and, as the building becomes a dice to be thrown on the table, then all the rest results. » (Rowe 1999, p. 192)

<sup>4</sup> Among others, we can recall *Voyage en Perse* by Flandin e Coste (1851), *Through Asiatic Turkey Vol. 2* by Grattan Geary (1878), *Amurath to Amurath* by Gertrude Bell (1911).

<sup>5</sup> « In my projects, I strive to return the centre of Stuttgart to pedestrians without eliminating cars» (Krier 1982, p. 139).

<sup>6</sup> Let's think about New Baris project: both to the possibility of recognising a typological abacus of reference for the design, and to the constructive and identity-driven rediscovery of the Nubian vault.

<sup>7</sup> This refers mainly to residential neighbourhoods built on Algerian soil between 1953 and 1957: Diar es Saada, Diar el Mahçoul and Climat de France.

<sup>8</sup> As Makiya himself pointed out, since he would have liked to expand the project area to give importance to the location: «I had to build a cathedral in an area suitable for a chapel» (Makiya 1990, p. 43).

<sup>9</sup> It should be noted that the project has various and different references: from Iraqi pontoon bridges, to Isola Bella on Lago Maggiore, to Frank Lloyd Wright's plan for *Greater Baghdad* (1957), which included an artificial island in the Tigris riverbed: the island of Edena.

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Flavio Menici  
**Rebuilding Aleppo. A Rewriting Matter**

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Abstract

The increasing political and economic instability in the Middle East region has caused an emergency condition that directly affects the architectural heritage of cities, so much to speak, in some cases such as Aleppo, of uricide, or deliberate destruction of the city of man. This raises again some reflections on the role of the discipline of architecture in the process of reconstruction, that is, on what are the limits, the criteria, and the instruments able to operate critically in these contexts. The current state of the city of Aleppo thus offers the opportunity for an investigation aimed at establishing an admissible framework of operational strategies to preserve the identity of places, conveying the elements that have characterized the urban phenomenon over time.

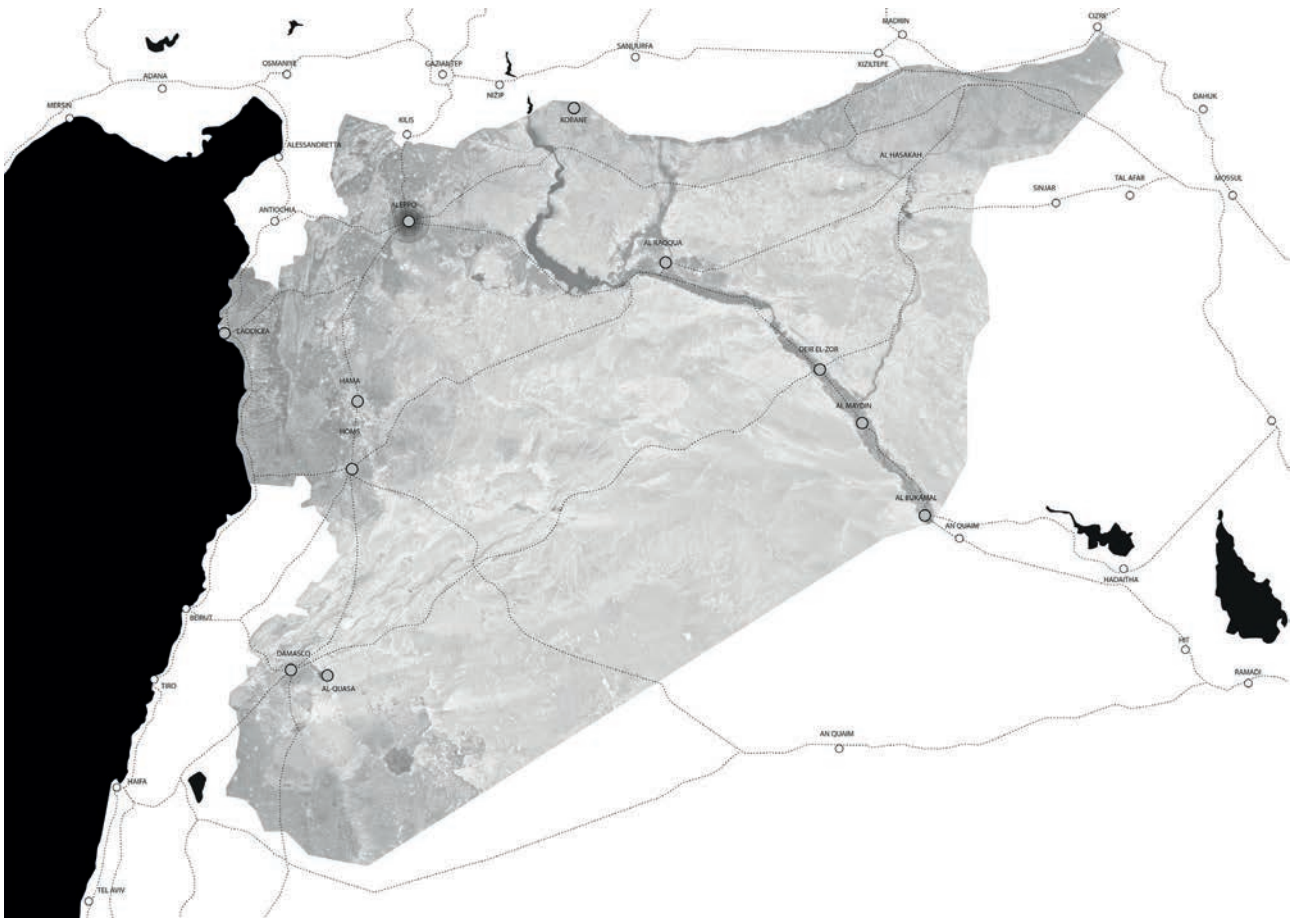
Keywords

Aleppo — Critical Reconstruction — Architectural Rewriting

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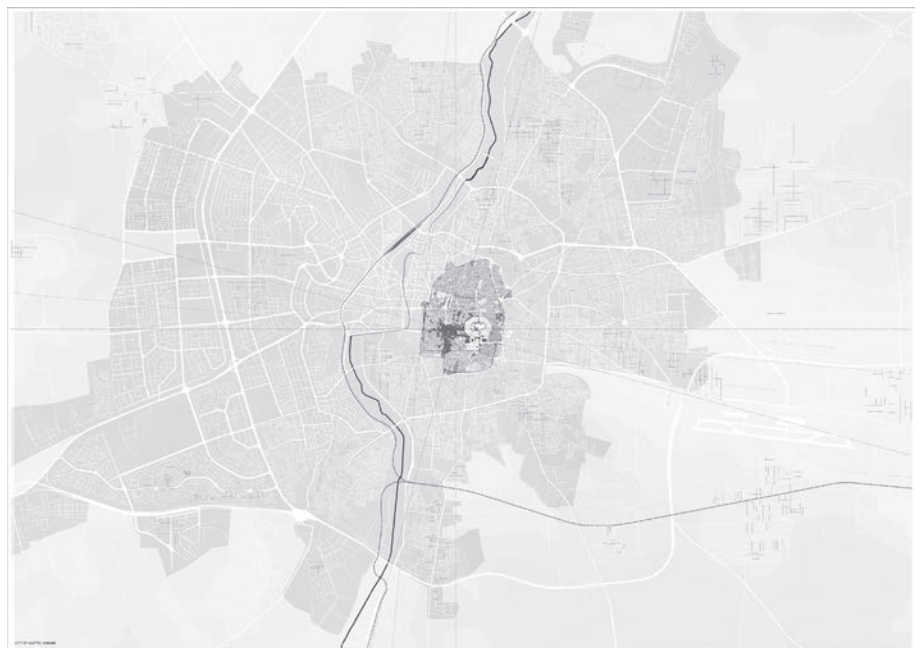
The architectural heritage of a significant number of Middle Eastern cities stands nowadays in a state of emergency following a conflict situation that has now become permanent. In this context, the mutilations reported by the city of Aleppo due to the recent civil war offer the necessary resources for a general reflection on the issue of the city's reconstruction (Figs.1-2). Its millenary history crystallized in the urban form makes the weight of the destructions so significant as to direct scientific research, and here we refer to research on composition in architecture, to question again how to rebuild such an architectural heritage. In other words, to investigate some admissible criteria in the reconstruction of a piece of the historical city that can no longer be recovered with actions aimed solely at the conservation of the architectural artifact. But what then are the limits and objectives of such a study?

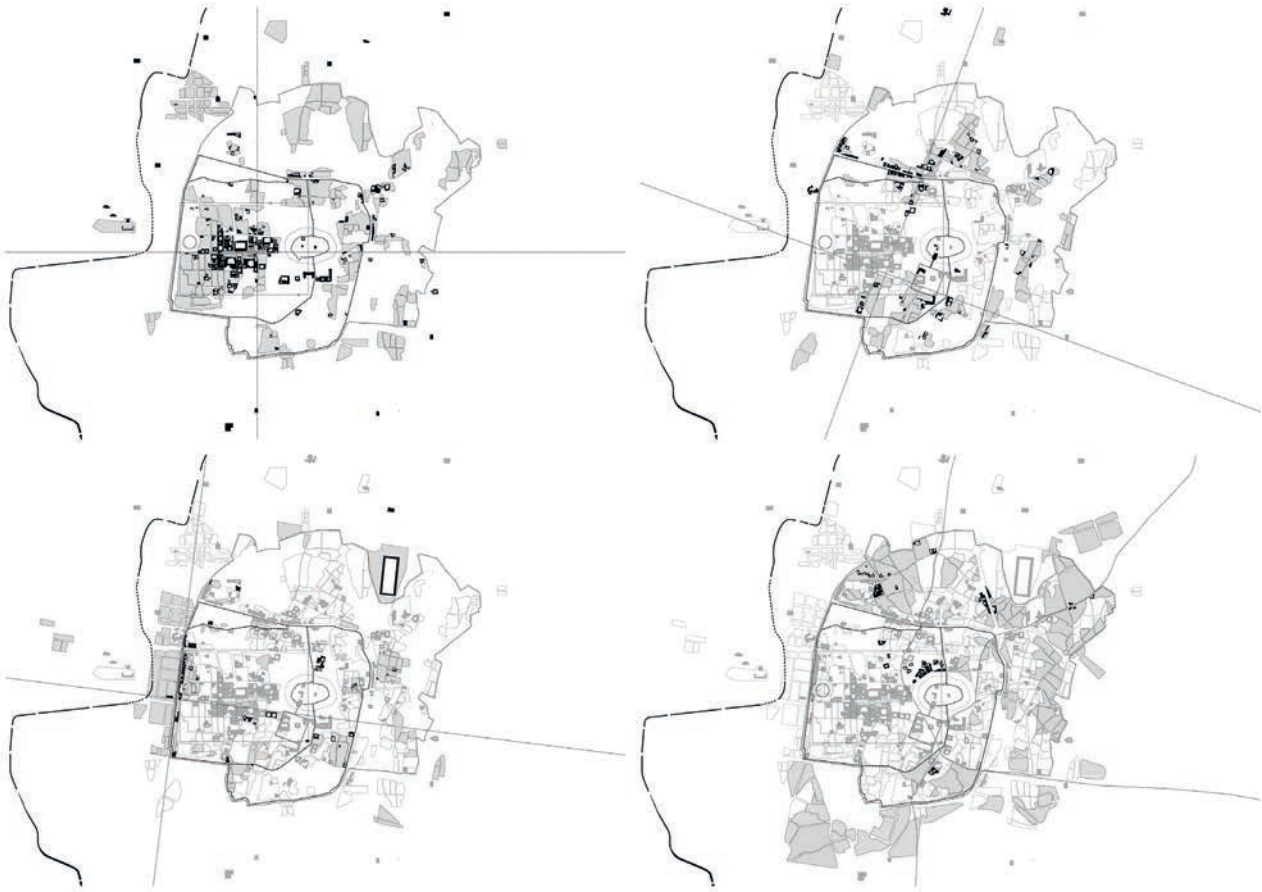
In the first place, we should recognize that a field of investigation such as that of reconstructions, moves research to ethically address issues related to design practice<sup>1</sup>, admitting that the contribution of the discipline of architecture to the reconstruction process consists in identifying a framework of admissible intervention strategies, operational criteria, compositional techniques, aimed at critically handing down the elements that have conditioned the evolution of the physical environment as permanent factors. Strategies that would have the task of preserving the forms and methods of use of space that human activity has produced, case by case, settlement by settlement, city by city throughout its history; to preserve, therefore, the cultural identity of local populations. On the other hand, safeguarding the identity of places becomes a necessary action in post-war reconstruction contexts, where more frequently



**Figs. 1-2**  
Territorial overview of the city of Aleppo. Drawing by the author.

Planimetric outline of the city of Aleppo, in evidence the historical center. Drawing by the author.





**Figs. 3-4**

Urban analysis of the city's settlement structures, from Roman centuriation systems to medieval informal settlements. Drawing by the author.

Overlap of settlement systems. Drawing by the author.



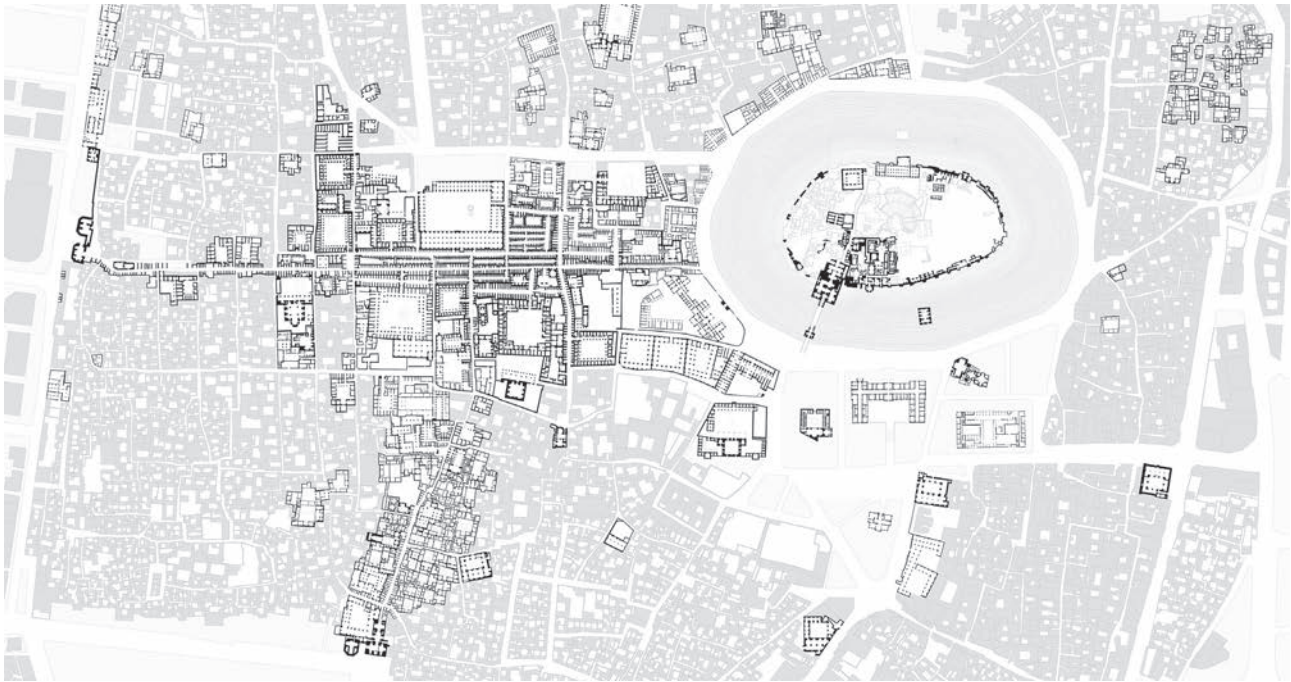
we observe premeditated aggressions against the architectural heritage of cities, their symbols, their culture, which, without means terms, we could define as attacks on the collective memory of which architecture is an active witness. It is a situation aggravated by the production and growth processes of contemporary cities, which are less and less inclined to critically respond to contextual demands than to produce self-referential mutations in the urban structure, independent of the aesthetic-functional needs that characterize the human environment<sup>2</sup>.

Hence the need to set up the reconstruction of the city of Aleppo starting from a more aware knowledge of the physical environment, aimed at deciphering the generative processes that have characterized the evolution of the architectural phenomenon over time (Figs. 3-4). Therefore, we talk about transposing into the design practice those permanent factors, or invariant elements, traceable in the dialectical and non-random relationship between architecture, city, and territory. More precisely, the concept of “invariant” intends to evoke those stable relationships over time between morphological and typological data<sup>3</sup>. In the case of Aleppo and, more generally, in Middle Eastern cities, this would mean first recognizing the archetype of the enclosure as a permanent factor in the construction of the city and architecture, and that this factor, or invariant element, is the response to specific contextual instances.

On the other hand, it is legitimate to argue that a conflictual relationship between the anthropogenic environment and the natural one has produced settlement modes characterized precisely by that gesture of appropriation of space that, through an element of separation such as a wall, a fence, or a defensive system, divides the city from the countryside as well as the private house from the public space<sup>4</sup>. Over time, this antithesis between human and natural environment has produced an evolution of the urban organism by budding of typological units with a central courtyard, generating a formal uniformity and density typical of Middle Eastern cities. Characteristic that, the one of uniformity of the urban phenomenon, is caused even by the strong symbolic charge attributed by Islamic thought to architecture and urban form, tending to prefer a semantic ambivalence of buildings concerning their intended use<sup>5</sup>.

In the reconstruction process, this search for the invariant leads us to consider not the single architectural element as the structure of the physical environment. That would consist of deciphering, on the one hand, the settlement modalities with which the monumental emergencies are organized in the space of the city and, on the other hand, how their presence has influenced the development of the residential fabric, which is, in term of quantity, the main factor in the evolution of the urban form. So that, we should admit that the growth of Middle Eastern cities has not been subordinate to a programmed planning process, but that it has taken place around settlement strongholds such as the mosque, the governor’s palace, or the structures dedicated to trading (for example, the constant presence in Islamic cities of the typological element of the Souk)<sup>6</sup>.

If it is true that we can recognize in the urban structure of Aleppo a similar attitude to grow by the addition of architectural units around a central monumental nucleus, represented in this case by the Bazaar and the Citadel, it is equally true that, contrary to what happens in the cities of an Islamic foundation, there are pre-existing settlement models that contributed significantly to define the physical structure of the city. Of



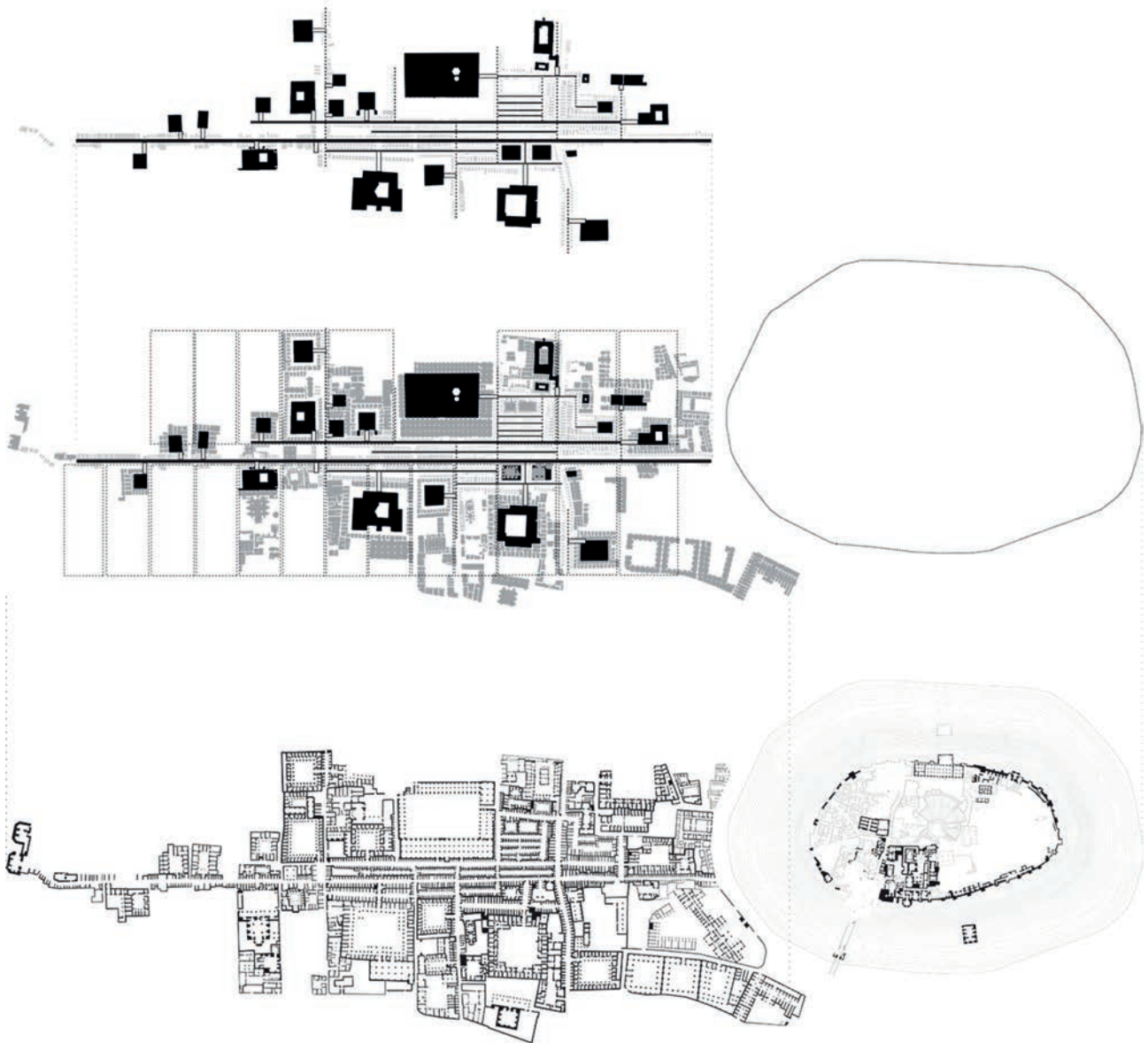
**Fig. 5**  
The typological structure of the Bazaar of Aleppo. Drawing by the author.

these models, some are directly recognizable from an analysis of the typological characters of the pre-existing structures, such as the permanence of the ancient *via recta* of Hellenistic matrix, later confirmed as the *decumanus* of the Roman centuriation system, which, over time, has played a fundamental role in the construction of the monumental system of the Bazaar and the Souk. Others can be traced through a more careful analysis of the urban layouts and the road system, from which it is possible to observe the presence of two other systems of Roman centuriation which, in addition to influencing the orientation of the building fabric, played a decisive role in tracing the dimensions of the urban blocks<sup>7</sup>. Therefore, the reconstruction of the mutilated or severely damaged sectors of the urban structure of the city of Aleppo would consist of a critical and selective choice of those permanent elements still susceptible to transformation. In other words, we should accept operationally and critically not only the elements recognizable through an analysis of the epidermal characterizations of the urban structure, but also those factors still operating that have influenced over time the construction of the architectural phenomenon.

Specifically, the recovery of some settlement constants that characterized the monumental structure of the Souk would seem a necessary action to preserve and integrate the original geometries and proportions, regaining in the reconstruction project that attitudes demonstrated by the pre-existence to grow by a linear succession of typological units with a central plan arranged along the axes of the Souk (Figs. 5-6). In that sense, the way how the architectures are grafted along the linear structure of the Souk can be experimentally reproduced in new formal solutions, preserving those settlement modalities typical of the area. These expedients in the choice of the settlement strategy would also allow us to complete the mutilated parts by marking the figurative autonomy of the new intervention while maintaining the invariant elements of the architecture of the Souk unaltered. In fact, in the urban transformation processes, it would be necessary to update the figurative code and the methods of use of spaces aimed at creating a combination between

**Fig. 6**

Conceptual model of the settlement structure of the Souk. Drawing by the author.



new and old, encouraging a dialectical relationship between the historic building and new construction that involves both the integration of new functional solutions as well as a figurative deformation of the original architecture. At the typological level, this can be translated into a greater complexity in the articulation of the internal spaces, achieved through the integration of new volume and surface units which, for example, in the case of the Souk could take place in the conquest of a basement to guarantee a doubling of internal routes. In addition to unifying the entire plant, the choice of transferring part of the secondary activities of the Souk to the basement would allow the acquisition of new spaces, albeit contained in the geometry of the original section.

So that the new architectural organism would be structured as a complex system which, in addition to reconnecting the parts of the ancient Souk, would potentially be able to distinguish its figurative charge from the set of pre-existing structures and, at the same time, to offer new spaces and volumes for the development of the market activity. It should also be specified that, in this process of functional integration of the typological data, the invariant adopted depends, case by case, on the specific characteristics of the existing building. For example, in the structures replacing the Khans – courtyard buildings mainly used for activities related to trade, used as a landing point for goods before their sorting within the Souk – the typological invariant is identified in the centrality of the open space organized around a courtyard, but with greater levels of complexity in the planimetric organization to ensure, with an equivalent system, a different attitude in the use of spaces (Fig.7).

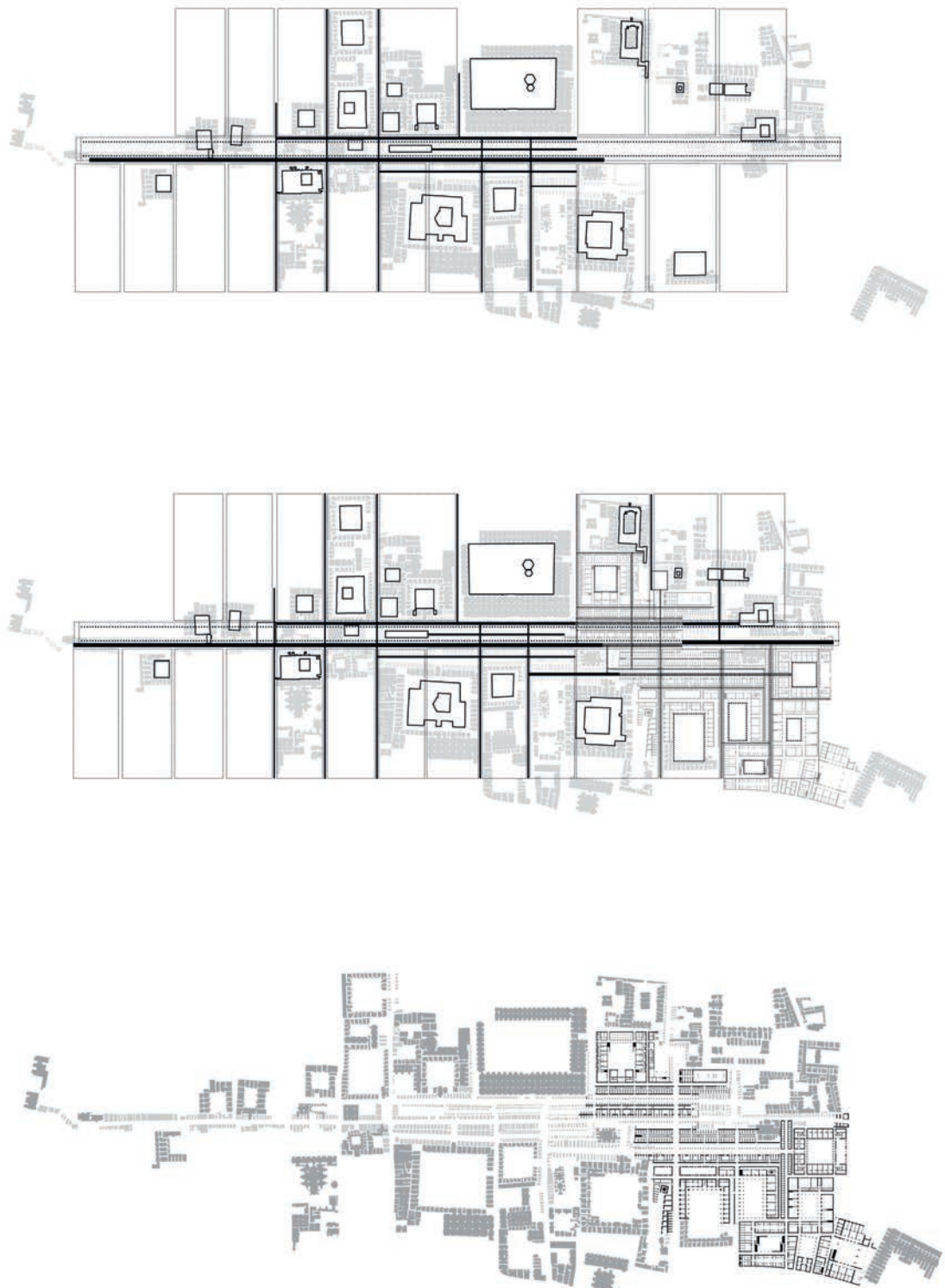
It is a case, that of the reconstruction of the monumental system of the Souk of Aleppo, which can be taken as a paradigmatic in the search for a methodology with which to critically approach the reconstruction of the city. In other words, the conditions of the ancient Souk of Aleppo, where, due to the huge amount of damage reported, conservation alone cannot be considered as the only admissible action, represent an occasion for an experimental investigation aimed at identifying a possible methodological approach susceptible to generalization and, therefore, potentially extensible to other sectors of the urban structure, if not even to other contexts. All this through operations aimed at actively recovering the elements of the urban phenomenon: the construction of historical knowledge of the architectural artifact to reproduce experimentally those qualities still admissible in design practice; the recognition of invariant elements in handing down those ways of using space that remain as constant factors in the architecture of the city; an analytical understanding of the structural and perceptual qualities of places, to transpose not so much the irrationality, the picturesque elements of the historical city as the measures, the proportions of space, the syntax of the elements that make up the urban structure.

We speak of aesthetic, spatial, figurative qualities that the city and architecture can offer when it demonstrates an ability to critically convey that latent identity contained within the elements that compose the urban structure. An identity of forms built through superimpositions, transformations, reconfigurations of the physical structure of the city, like a text that, erased and rewritten several times, maintains traces, presences/absences witness of a past still alive and recognizable through a more careful analysis of the epidermal surface of the writing space.

Space, that of the city, which, like an urban palimpsest, in its present

**Fig. 7**

Settlement model for the reconstruction of the ancient Souk, conceptual schemes. Drawing by the author based on the thesis project by Stefano Davolio "Re-writing Aleppo. The reconstruction of the city center"; supervisor: prof. Domenico Chizzoniti; Tutors: arch. Flavio Menici, prof. Stefano Cusatelli; A.A.2017/2018.



condition also hosts the memory of its previous configurations. And it would be enough to critically recover these traces, these epidermal characterizations, made of discontinuity, of collisions between elements of distant eras, of syntactic dissonances to imagine building the future image of the city in continuity with its history. It is not a question of solving the problem of design by taking refuge in an uncritical, and therefore not problematic, use of forms and types from the catalogue of history, but of building a creative path starting from a dialectical comparison with the elements of tradition.

In this sense, it would be feasible to approach the reconstruction of the city of Aleppo, and not only the case of the Souk, as a process of syntactic reorganization (read rewriting) of the formal, settlement, and figurative elements that make up the architecture of the city, building the new by recovering, as Guido Canella would say, «the figures, the syntagms of architecture, through their gradual and well-founded redemption from a subjection to the catalog of history»<sup>8</sup>. It is a process, the one of architectural rewriting, that critically accepts the persistent factors within both the apparent and the hidden structure of the city, acquiring in the creative process its main urban facts in their physical and conceptual consistency. In this way, approaching the reconstruction of Aleppo as a process of architectural rewriting would mean recognizing both the permanent elements in the urban structure and the emblems, images, and figures behind the city's forms and then reorganizing them into new formal systems. This conceptual analogy between reconstruction and rewriting aims at suggesting a methodological approach that goes beyond the more orthodox “as it was where it was” to direct the creative process towards a higher degree of typological and figurative experimentation.

## Notes

<sup>1</sup> We refer to the definition of “ethics” given by Massimo Cacciari during the conference held on Giancarlo De Carlo entitled Participation, Ethics and Future organized by the Ordine degli Architetti di Milano on December 19, 2019.

<sup>2</sup> Harvey, David. 2013. *Città ribelli. I movimenti urbani dalla comune di Parigi a Occupy Wall Street*, Milano: Il Saggiatore; Lefebvre, Henri. 2014. *Spazio e Politica. Il diritto alla città*, Verona: Ombre Corte.

<sup>3</sup> Cfr. Aymonino, Carlo. 1977. *Lo studio dei fenomeni urbani*, Rome: Officina Edizioni; Canella, Guido. 1965. *Sulle trasformazioni tipologiche degli organismi architettonici*, Milano: Istituto di Composizione Architettonica della Facoltà del Politecnico di Milano; Samonà, Giuseppe. 1975. *L'Unità Architettura – Urbanistica*, Franco Angeli, Milano.

<sup>4</sup> Cfr. Cuneo, Paolo. 1986. *Storia dell'urbanistica. Il mondo Islamico*, Roma: Laterza; Petruccioli, A. 1985. *Dar Al Islam. Architetture del territorio nei paesi islamici*, Roma: Carucci.

<sup>5</sup> Grabar, Oleg. 1973, *The formation of Islamic Art*, Yale: Yale University Press; Grube, E. J. 1978, “What is Islamic Architecture?” in A.A.V.V., *Architecture of the Islamic World*, London: Thames and Hudson.

<sup>6</sup> Cfr. Bianca, Stefano. 2000. *Urban Form in the Arab World*, Zurich: vdf Hochschulverlag AG an der ETH; Creswell, K. A. C. 1958. *A short Account of Early Muslim Architecture*, Harmondsworth: Penguin Books Ltd; Petruccioli, Attilio. 2007. *After Amnesia. Learning from the Islamic Mediterranean urban fabric*, Altamura (Bari): Grafca & Stampa.

<sup>7</sup> Cfr. David, Jean-Claude. 1988. “Production et occupation de l'espace urbain à Alep”, in *Les Annales de la recherche urbaine*, no.37, pp. 85-93; David, Jean-Claude. 2002. *Alep*, Paris: Editions Flammarion; Neglia, Annalinda Giulia. 2006. *An interpretation of the urban fabric: the structure of pre-Islamic Aleppo*, Bari: PoliBA Press;

Sauvaget, Jean. 1941. *Alep. Essai sur le développement d'une grande ville syrienne, des origines au milieu du XIXème siècle*, Paris: Geuthner; Wirth, Eugen. 1991. "Alep dans la première moitié du XIXe siècle: un exemple de stabilité et de dynamique dans l'économie ottomane tardive", in *Revue du monde musulman et de la Méditerranée*, no.62, pp. 133-149.

<sup>8</sup> Canella, Guido. "Ingegneri create nuove forme", in *Conrospazio*, maggio-giugno 1972, pag. 99-100.

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Domenico Chizzoniti  
**Rewriting and city structure**

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Abstract

Re-taking from literary practices the attitude of critically reworking formal characteristics belonging to something previous, rewriting offers itself as a possible technique for transforming parts of the city. This approach makes it possible to prevent mimetic results, highlighting conversely the substantial texture of the city, selecting its exemplary elements. The re-writing intent breaks down the relationship between memory, as the object of the design action, and narrativity, which is the action that represents, through construction, the space of memory. In the proposed case studies of Aleppo and Mosul the relationship between memory and narrativity becomes a crucial issue for involving the context and its absences, giving the design proposals the interpretative capacity to confer values and new meanings to the city.

Keywords

Rewriting — Reconstruction — City structure — Figuration

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*“...nullus enim locus sine genio est...”*

In the different working hypotheses on reconstruction one of the techniques adopted in rethinking the transformation of some parts of the city is linked to the concept of rewriting. This concept is closely connected to that of the urban palimpsest<sup>1</sup>. Architecture seems to be for the city what memory is for invention. Some literary intertextual techniques can be intertwined in the understanding and deciphering of urban spaces<sup>2</sup>.

This reading of the city that combines literary and architectural literary, identity and imagination, memory and creativity, interacts with the construction of architectural space. The plurality of historical phenomena and the stratification of urban structures in the city constitute the categorical aspect of transformations. The historical and aesthetic pluralism evoked in the palimpsest of the city constitutes the paradigmatic aspect of the urban layout, conceived as an alchemical combination of matter and space. Intertextuality, deconstruction, subversion, and rewriting are factors recognized as emblematic of what has been called “postmodernism”. These characteristics are universally accepted in the international critical debate as “symptomatic” of the indefinable postmodernism, a heterogeneous and all-encompassing framework in which such recurrent formal aspects draw a complex motif open to analysis. Yet, on the architectural side, more concreteness would be needed regarding the specificity of the discipline of architecture in a particular interest in the physical aspects of the city. The underlying issue is that we are no longer able to understand the essence of the semantic structure of the city regardless of the technical, urban planning or architectural intervention.

Permanence and discontinuity are arranged on two different planes in our artistic or technical work, so that the nature of the city is already always the element “exiled”, sublimated, transcended in and by our work. This also implies that the natural link with the city is demonstrated in historical time and in the multiple forms of the city’s culture, and its transformation is not admissible without prior understanding of the constitutive datum in a horizon of meaning, therefore in a historical and cultural horizon.

Can we still talk about the evolution of the city, and above all, what is the role of architecture and what does this transformation of the urban layout consist of today?

The phenomenon can be ascribed to certain parts of the city, susceptible not so much to conscious and shared transformation as to rehash, to change, to convert from one state to another, regardless of the formal, aesthetic and therefore architectural premise. This phenomenon is quite evident and well delineated in Mike Davis’ ‘Geographies of Fear’. For example, security-obsessed enclaves are a logical evolution of the stacks of monads characteristic of contemporary buildings. Models that undermine the identity of cities, not only traditional European and Mediterranean ones. The undifferentiated fabric produced by summations of basic elementary structures is not the continuous city, nothing to do with Soria y Mata’s ‘Madrid-Ciudad lineal’ or Miljutin’s Sosgorod.

This new dimension of urban settlement seems completely alien to the founding principle of the idea of the city as a community, as happily testified by those archaeologists for whom cities began to define themselves as such when the space between buildings took on meaning, or rather when the significance of the spaces of relationships began to prevail over that of individual buildings. On the other hand, when it is ascertained that not only the monuments are able to establish reciprocal relationships but also the open free space, the connective space with the mobility infrastructures, the historical dimension of the city changes with the settlement of productive structures in the urban context. This condition, within the constructive development of the city, evolves through a process of transformation determined by the succession of additions, differentiations, oppositions, polarities and architectural integrations. However, if we think of the “theories of permanence” as developed by Marcel Poète, Pierre Lavedan and subsequently taken up by Aldo Rossi<sup>3</sup>, the knowledge of the city becomes an essential fact for the understanding and critical decipherment of urban form, for the intelligibility of the aggregative consistency of the primary and secondary elements of architecture. The loss of its formal structure is one of the most striking aspects of the crisis of urban settlement and its discontinuous fragmentation. As long as, 40 years ago, Konrad Lorenz considered the unravelling of the built environment to be one of the «deadly sins of our civilisation». It is therefore necessary to explore the role of persistence in the constituent elements of the city about its inescapable transformation, even in the changing and sometimes contradictory recent tendency towards discontinuous and summary alterations. Recognising the plot and recomposing its parts does not mean simply mimicking the appearance of new buildings. On the contrary, it would be necessary to recognise the substantial plot in the labyrinth<sup>4</sup> of reality, the conceptual and operational elaboration through a critical reconnaissance, oriented towards selecting the elements considered exemplary, and not the mediation between them and the discarded, the insignificant. The way to appropriate the constituent elements of the city is above all to cultivate knowledge of

them. The fact that the architect is called upon to act directly within the physical structure of the city and there compose his or her own poetic world invests the practice of architecture with the responsibility of specific knowledge of that condition. It then becomes decisive to call upon the resources of the specific context, dividing the authentic not only from the apparent superfluous, from the useless illusory, but from the insignificant: «... *Ce qui limite le vrai, ce n'est pas le faux, c'est l'insignifiant...* »<sup>5</sup>.

In the project experience, both the paradigm of knowledge becomes an unavoidable fact – if it intends to promote a multidimensional approach also through the contribution of cognitive sciences against any deterministic and a priori mystification in the assimilation of reality – and an epistemological approach around the invoked scientific procedure of the project, able to accept and discern methodologically the authenticity of the contents and the articulation of the phenomena considered. Thus, this research progresses through the reconstruction of underlying traces, sometimes even anticipating its paths, foreseeing its developments, placing in any clue the value of the «figure in the waiting»<sup>6</sup>, an act of re-composition of the basic structure of the places. But there is more. If one were to assume that in the assumption «*nullus enim locus sine genio est*»<sup>7</sup>, the particular significance of the sacredness of places is not so much linked to the relevance in itself of the individual context, monumental or marginal, natural or artificial, spontaneous or conditioned, etc., but rather to the typical specificity of each individual circumstance of the environment, then man's need to personify places or elements of nature would concern the arcane idea that each place has well-defined characteristics that must be rediscovered and re-valored in order to enter fully into harmony with it.

This position belongs to a tradition rooted in a classical idea of the sacredness of places. If Latin culture relies on the transcendent dimension of the Genius, Greek culture recognizes itself in the mystical entity of the Daimon, the demon, but with an entirely different meaning from the conventional one: a positive spirit that inhabits every human being with the task of guiding him or her in the fulfilment of their destiny. Platonic philosophy assigns the Daimon not only to people but also to places and things: a house, a city, a mountain, a forest, a clearing, or a river. A legitimate question then concerns the specific role of rewriting in the palimpsest of the city, or at least whether the transformation of the city is susceptible to a critical approach capable of enhancing its physicality. Rewriting then means resonating with the Daimon, or the Genius if you will, provided however that each place can be susceptible to a non-conventional evaluation, in a physical and material sense, considered not only in its “rational” essence, but rather as an inextricable set of different elements, belonging both to the physical and geographical sphere, and to the historical, economic, social, cultural and artistic ones. Note that rewriting here is meant also as the act of designing as a case of the broader horizon of change (imitation, representation, etc.), and a concrete critical and hermeneutic challenge, in an attempt to isolate the differential elements (in the first instance those that are hidden or even unaware) that, standing out against such a mimetic background (repetitive, indifferent), will sanction the significance, both aesthetic and theoretical, of the various operations of transformation of the environment.

### Memory and human settlement

It often happens that the practice of the project in its physical consistency, as an active and generative action through an act of volition, even individual, is even considered oxymoronic in the most intransigent and restrictive interpretations within the action, for example, of the discipline of restoration, conservation, archaeology, etc. Therefore, a second question concerns the limits and prerogatives of the architectural project in the process of transformation of the city, excluding it from the phenomena of undifferentiated sociology, from a massified phenomenon of human experience. Concerning the specific attitudes of its exegetes, the city has now taken on a particular categorization: more or less functionalist, utopian or materialist, sacred or blasphemous, ecological or systemic, today even smart<sup>8</sup>. In this attempt to rewrite parts of the city, its form is assumed as an indispensable fact, in Pasolini's sense of the term<sup>9</sup> the form is also understood as a perceptive condition<sup>10</sup>.

In this sense, the city as a "petrified text" with its plot, with the invention of its symbols and meanings, remains in a rhetorical dimension, within a "warp" more or less consistent with the unravelling of the recurring figures of its history. The act of transformation also represents a process aimed at moving, superimposing, involving forms and figures extracted from a textual and critical analysis of urban form. In other words, the process of transforming the architectural form generates an idealized place, an architecture that tends to evoke the unfolding of events that have marked the evolution of the city, evoking its narrative structure through the transfiguration of the elements of urban memory. It would also be necessary to dispel some of the simplistic progressions that relegate the city to an abstractly evolutionary dimension, almost a struggle for survival among the species and the presumed primacy of one over the other. So that it is not so much the search for singularities that imprint the seal of uniqueness, but rather its untiring peculiarity to re-write the same elements over the centuries of its transformation, giving life to a phenomenon in which the creative act resists technical annihilation: there is still an area of hope offered by art, that of the city, that gives meaning, welcomes and builds a human order.

This conflict between forms in front of which Pasolini confronts us recalls in more general terms some of Henri Lefebvre's positions in one of his last books on the concept of the "urban"<sup>11</sup>.

Far from coinciding with the (ancient) polis and the (medieval) city, the urban replaces them by incorporating them, thus without excluding them as historical moments<sup>12</sup>. In a general sense, and therefore beyond individual specificities, the city was considered a collective work of art by Henri Lefebvre<sup>13</sup>, because it was not only the result of the organization of space, but because this space had been ordered according to the needs of the different users who inhabited it, according to their ethics and above all according to their aesthetic sense. Henri Lefebvre also spoke of the right to the city, which, within the rhetoric of the Urban Age, is perhaps too sordidly divided between the advocates of Rebel Cities<sup>14</sup> (as David Harvey put it) and the now conventional idea of participation as a democratic illusion of Droit de la Ville.

On this specific issue, the point of view of a paper by Salvatore Settis<sup>15</sup> is rather stimulating when he argues that the right to the city is clearly a «reflection on the historical city» and that it is a "reflection on the city itself". There would be no doubt that the urban dimension has something

to do with art if we think of the early city, the city so full of symbolic and mythological values. The city to whose production the gods were believed to have contributed. And then the ordered and rational city of Leon Battista Alberti, Filarete, Sebastiano Serlio, Andrea Palladio and Vincenzo Scamozzi, Ledoux, Melnikov, up to Le Corbusier, or that, to quote Richard Sennett<sup>16</sup>, in which to seek otherness “the essence of urban culture, that is, the possibility of acting together without necessarily having to be identical”.

If we assume that the background is the city, its form, the recognition of its status as a collective fact, a third point would concern the relationship between the architectural project and the sense of the transformations of the physical environment. So that, to find some reasons in the places of the city and to be able to physically transform them, it would be necessary to recognize some constants in the history of the settlement, able to assume, in the complexity of the phenomenon of architecture, also some cognitive ambits not strictly architectural, able to restore in a unitary way the relevant passages in the evolution of the urban settlement.

According to this premise, the history of settlement certainly has an important place. One thinks of Leonardo’s extraordinary design for the city of Milan, a route of contiguous streets arranged in a half-circle and a succession of churches arranged in a curved line that almost completes the circumference, as if to transcribe the perimeter of the Celtic oppidum of Milan. Bonvesin de la Riva, in his work *De magnalibus Mediolani*, 1288, wrote: “This city itself is round, like a circle. Such admirable roundness is the sign of perfection”. In the 14th century, Galvano Fiamma, inspired by this evocation, drew a plan of Milan formed by two perfectly circular and concentric circles of walls. Of course, this observation does not only take into account urban history in a strictly disciplinary sense, but rather the multiple fields of knowledge that have interfered with the physical layout of the city. Thus, that with history is here interpreted not as an allusive role, but rather as a structural impulse in the urban project. In this sense, it is necessary to proceed rigorously and selectively in evaluating all the tools that the history of the city makes available to the architectural project. Firstly, it is necessary to identify in the folds of historical development a tradition of work in which a conscious area of architectural design has always manifested itself, which has critically intended to historicize the architectural project.

It is not just a matter of activating that attitude towards memory in itself, in the sense of understanding history as a free repertory of forms. Rather, it is a matter of raising oneself from the condition of arbitrariness and carrying out an authentic operation of historicization aimed at grasping both the contradictions and the virtualities that the historical past has given back, to regenerate a critical dimension that the project takes on in connoting a possible transformation of the physical environment. The assumption of a historical dimension means taking responsibility for the past and tradition as much as for the present and future. Therefore, it would be necessary to break down the question of the relationship between memory, which is the object of design action, and narrativity, which is the action that is produced in conceiving, representing, implementing and then designing, through construction, the space that memory celebrates. In this sense, and because of this specific “rewriting” intent, at least in architecture, each project is also a story in itself, since it is almost impossible to trace a generalized taxonomy as an exact protocol ready to assist the physiological uncertainties of the

design process. Rather, to paraphrase Benjamin of the Baroque Tragic Drama<sup>17</sup> (for whom «reflection bends over the work»), in art (if in this case it is art) the work is (must be) always right, in the sense that the work always carries within itself the possibility of subverting schemes, genres and canons, of invalidating (at least in its individual case) established aesthetic taxonomies. In other words, it can falsify any discourse and theory on art. When this is not the case, when it does not happen, when works of art go begging for their legitimacy from discourses, then art (or that particular art) goes through a phase of regression, contraction and decadence. If the work were to be entirely resolved in the discourses that preceded and “prepared” it, it would thereby sanction its own inessentiality. So perhaps a part of the project that in the act of rewriting is not limited simply to certain aspects of formal or typological correspondence, but rather to something deeper, something linked to the generative principles that are at the basis of the nature of the formal characteristics of architecture, those «...to be found, as in English jurisprudence, in the series of cases and sentences to which to refer for a presumption of a formal character...»<sup>18</sup> case by case, as Ernesto Nathan Rogers would have said<sup>19</sup>.

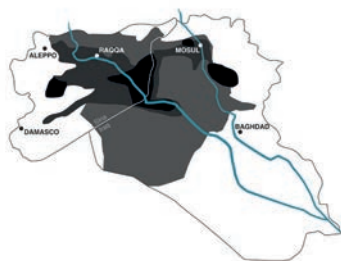
### An operative case-study

The case study that recurs in the ongoing research on this topic concerns the reconstruction of some cities in the Middle East that were mutilated and destroyed following the well-known “Syrian Crisis” that began in March 2011 (Fig. 1). In particular, in the case of the city of Aleppo in Syria and the city of Mosul in Iraq, the heavy bombing compromised a large part of the historical centre, the urban fabric and the monuments of the cities. The theme of the preservation of identity and that of the intrinsic character of this place constituted the horizon of meaning of the different working hypotheses (Fig. 2).

Aleppo lies in a particularly strategic location and has been at the centre of important trade routes since pre-Roman times. It is therefore not for political or religious reasons that the city has stood out over the centuries, but rather for its ability to be a barycentric pole on the trade routes that linked Europe to the Middle East, or the Mediterranean Sea to China. The destruction of the Suq, the economic and commercial heart of the city, thus becomes a particularly significant symbolic attack on the city’s ancestral role and identity (Fig. 3). The Al-Medina Suq system remains the city’s main market and is increasingly becoming a tourist attraction capable of guaranteeing that positive boost to the preservation and renewal of a historical and complex area, this part of the city has lost the role and commercial importance of the past. Therefore, rebuilding this part of the city, in addition to guaranteeing the minimum conditions for a hoped-for economic and social recovery of the Old City, would mean intervening within those vital nodes of the city itself in rethinking the propulsive role of the Khan, the Madrasas, the Mosques and the city’s inhabitants.

The analysis of the persistence of the urban structure, the formal order of the Hippodamean city, the linear arrangement along the axes of the ancient Roman *cardo* and *decumanus*, the historical core around the Citadel block, represent it with an extraordinary *parterre* of Hellenistic, Roman, Ottoman, Arab and Armenian-Maronite culture, just to mention the main geo-cultural ancestors.

The rebuilding hypotheses start from the valorization of the urban voids



**Fig. 1**  
Territories under the control of ISIS in 2014 (light gray), 2016 (gray) and 2017 (black).

**Figs. 2 a,b**

War destruction on a territorial and urban scale. Aleppo (2a and 2b).

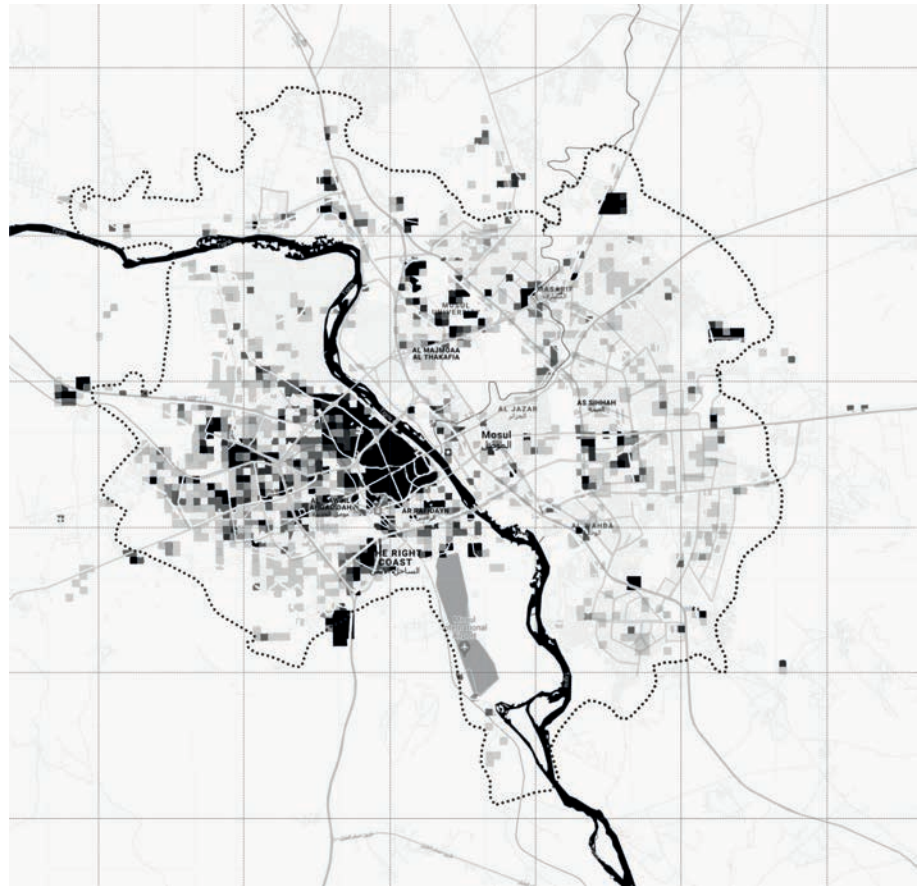
[Davolio / Dogari - Bello Melo - Master Degree Thesis , Politecnico di Milano, April 2019 and July 2021-Supervisor D.Chizzoniti].



**Figs. 2 c,d**

War destruction on a territorial and urban scale. Mosul (2c and 2d).

[Davolio / Dogari - Bello Melo - Master Degree Thesis , Politecnico di Milano, April 2019 and July 2021-Supervisor D.Chizzoniti].

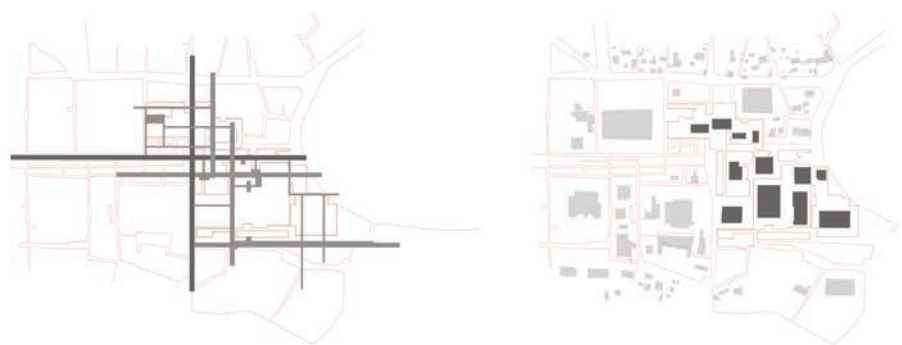


**Fig. 3**

The city of Aleppo before the destruction due to the civil war.  
[Davolio - Master Degree Thesis , Politecnico di Milano, April 2019, Supervisor D.Chizzoniti].

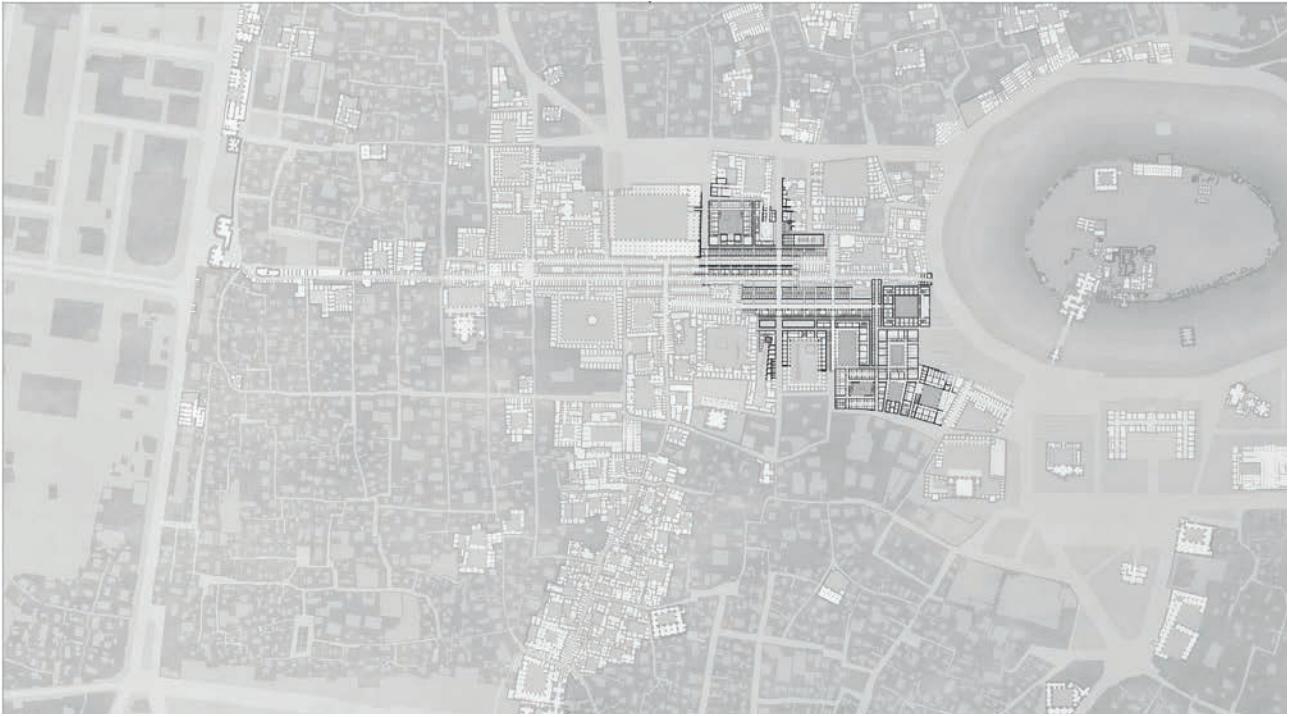
**Fig. 4**

The revival of some invariances: the linear structure of the souk and the courtyards.  
[Gugunava - Sozuner - Master Degree Thesis , Politecnico di Milano, December 2018, Supervisor D.Chizzoniti].

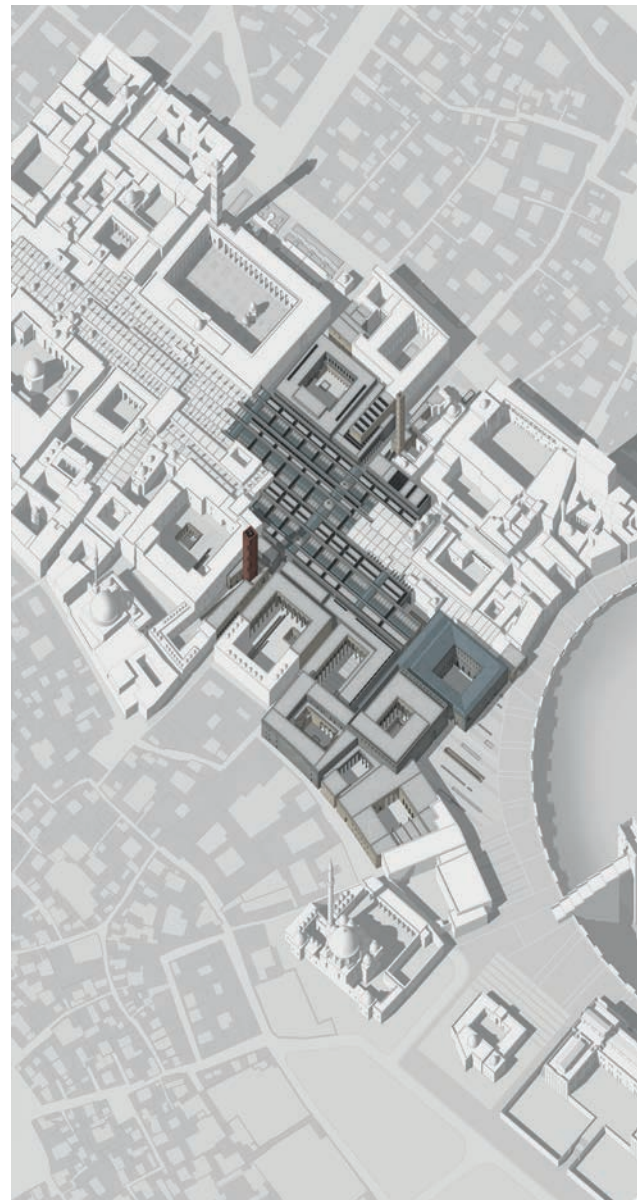


left by the bombings around the Great Mosque, a building traditionally surrounded by public and collective activities able to offer a high rate of interaction between the different social activities. With the recent episodes of war this system has been compromised, and it has therefore been necessary to rethink it through the insertion of new complementary activities (from some sectors linked to the production of local handicrafts to workshops for arts and crafts directly related to the reconstruction) in an attempt to reconstruct the necessary complexity starting from the same elementary arrangement of elements that characterized the original version of the Urban Bazaar system (Fig. 4). Another aspect concerns the reiteration of certain typological “invariances” which maintain a constant arrangement with a variable function: the combination of the fixed arrangement of the central space of the madrasa, combined with adjoining student housing units, similar to a religious college through the interposition of four Iwans built in the middle of each courtyard front, thus producing a cruciform arrangement in contrast to the continuous flow of the space of the traditional prayer hall; the evolution of the traditional sequence of the hammam (public bath) which by monumental adoption of the sequence of the thermal rooms of Roman origin (calidarium, tiepidarium, frigidarium) reinvents an exclusive sociality in the ritual of ablation.

Thus, in the hypothesis of reconstruction, these attempts take on the theme of continuous functional contamination as an antidote to typomorphological undifferentiation, in an attempt to exorcise the tendency underway in a large part of the glossy architectural culture that superimposes the neutrality of form on the complexity of the program of activities (Figs. 5-9).



**Fig. 5**  
The project for the Aleppo souk.  
[Davolio - Master Degree Thesis , Politecnico di Milano, April 2019, Supervisor D.Chizzoniti].



**Fig. 6**  
The project for the Aleppo souk,  
axonometry.  
[Davolio - Master Degree Thesis , Politecnico di Milano, April 2019, Supervisor D.Chizzoniti].



**Figs. 7-8-9**

The project for the Aleppo souk, urban sections; views.  
[Gugunava - Sozneri - Master Degree Thesis , Politecnico di Milano, December 2018, Supervisor D.Chizzoniti].

### City and figuration

Finally, the fourth point concerns the overcoming of the rewriting process, the figurative nature of the work of art, from the single architectural artefact to the most basic artefact produced by visual language. This nature is linked to memory, which has inspired both content and formal aspects. While the pure science of the image, and in particular the theory of the figurative act, moves in the direction of recognising the autonomy of artistic data, contemporary aesthetics continues to stiffen figuration as an act of artistic volition in the aseptic fixity of its perfection, regardless of the conditions of the surrounding environment. In other words, it is a question of restoring to figuration its autonomous vitality and the authority of its action, the one that was originally typical of the myth of art and that the imperative of reason has emptied of its incisiveness and fertility.

It would therefore be necessary to remove figuration from this paradoxical destiny of pure anesthetization and to regain its original prerogatives, thus creating a wider experimental domain for the project. In a historical succession, the permanence of symbolic elements has interacted positively with artistic and architectural achievements. In the absence of admissible and direct references, the culture of architectural design has always revealed its own critical value which, beyond direct sources, is advanced by experimental approaches that place the question of transformation on a less empirical level, let us say more inductive, aimed at a possible interpretation of presence as a finding, and its idealization as an absence. It is not just a question of physical and material absence.

Above all, it is an apparent presence, when the physical absence is synonymous with a missing aspect related to culture, identity, tradition and society. At this specific juncture, design has a concrete role in trying to make these absences not only apparent but also present, bringing the project back to a conceptual threshold, restoring a form of critical awareness in the relationship between the artefact and the new construction. This second aspect is more related to a certain creative, experimental attitude, and therefore particularly fruitful than the deductions of simple conservation, invoking a more complex approach that relies on design action aimed at enhancing not only the individual finding? but the entire context. What is the significance in this experience of regenerating the concept of absence? It is a hypothesis that moves from a metaphorical reconstruction, not similar but possible, in which the constituent elements are recognized allegorically, without simulating established philological truths, but rather authentic interpretations of meanings restored in a conceptual key. It is a procedure in which architectural design plays a central role in moving the plan from the claim of objectivity to that of a possible interpretative action that, case by case, induces the project to give new meanings and values to the single proposal.

Along these lines, and in a completely experimental way, another circumstance of work has made it possible to verify 'case by case' the opportunity to interact with a tragically extraordinary context such as that of the city of Mosul in Iraq. Lying on the Tigris River, the city faces the ruins of the Assyrian empire of Nineveh (Fig. 10), an archaeological park on the opposite bank of the river, in an area that was regularly flooded, creating a damp and very fertile soil. These two polarities have conditioned the urban form by identifying from the beginning the opposite banks of the river, the right bank with Nineveh and the left bank with the Old City, as autonomous and independent elements. The total area of the Old City is



**Fig. 10**  
The city of Mosul and the contrast with Nineveh.



**Fig. 11**

The strategic project for Mosul (from left to right: a center for education, the central mosque, the reconstruction of a portion of the Souq and the Citadel museum).

about 250 hectares and consists of 251 ‘mahala’ districts on both sides of the Tigris. Its location at the crossroads of important trade routes and the heterogeneity of its culture have promoted this centre as one of the most important in the Islamic world. The old city is extremely rich in historical buildings such as mosques, churches, monasteries and schools and the famous citadel.

Mohannad has tears in his eyes, his wife Marwa tries to console him and together they set off to see their house, abandoned more than a year ago to seek shelter in the eastern part of the city, liberated by the Iraqi army in January 2017, many months before the end of the July battle. Thankfully, our little house was not razed to the ground. With some renovation work we could live there again. But we don't have the money and the government is not planning to rebuild either the basic infrastructure or private homes<sup>20</sup> (Bellingreri, 2008).



**Fig. 12**

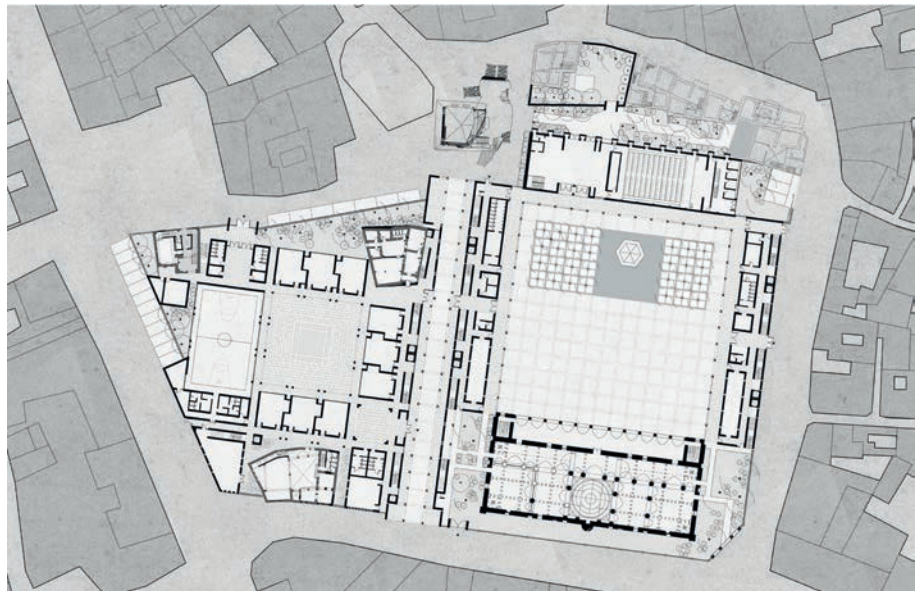
The mosque in its post-war state of destruction.

Unlike Aleppo, the strategy adopted set up intervention hypotheses on some specific points of the historic centre as a consolidation and reconstruction of its essential activities (Fig. 11). The reconstruction has privileged a point-based strategy around some of the city's central nodes: the ancient Citadel, the old part of the Suq and a few blocks from the great al-Nuri Mosque, of which only part of the entrance door and the dome remain; even of the famous leaning minaret, the city's symbol, only the base remains intact (Fig. 12). The mosque reconstruction project starts from the assumption that, once an asset has been deliberately destroyed, it is quite problematic to think of adopting a ‘where it was as it was’ strategy to rebuild it in its original form. On the contrary, the methodological approach adopted envisages the assumption of some complex elements regarding a critical reconstruction, both from a typological and figurative point of view, starting also from some urban facts related to the reconstruction process and based on the analysis of the settlement structure of the city and the specificity of the site.

Therefore, for the reconstruction of the Al-Nuri complex, the gap between the original urban entity and the trace of the surviving fragments is considered as a possible opening to contemplate the option of a critical reconstruction in which new activities and functions are placed within

**Fig. 13**

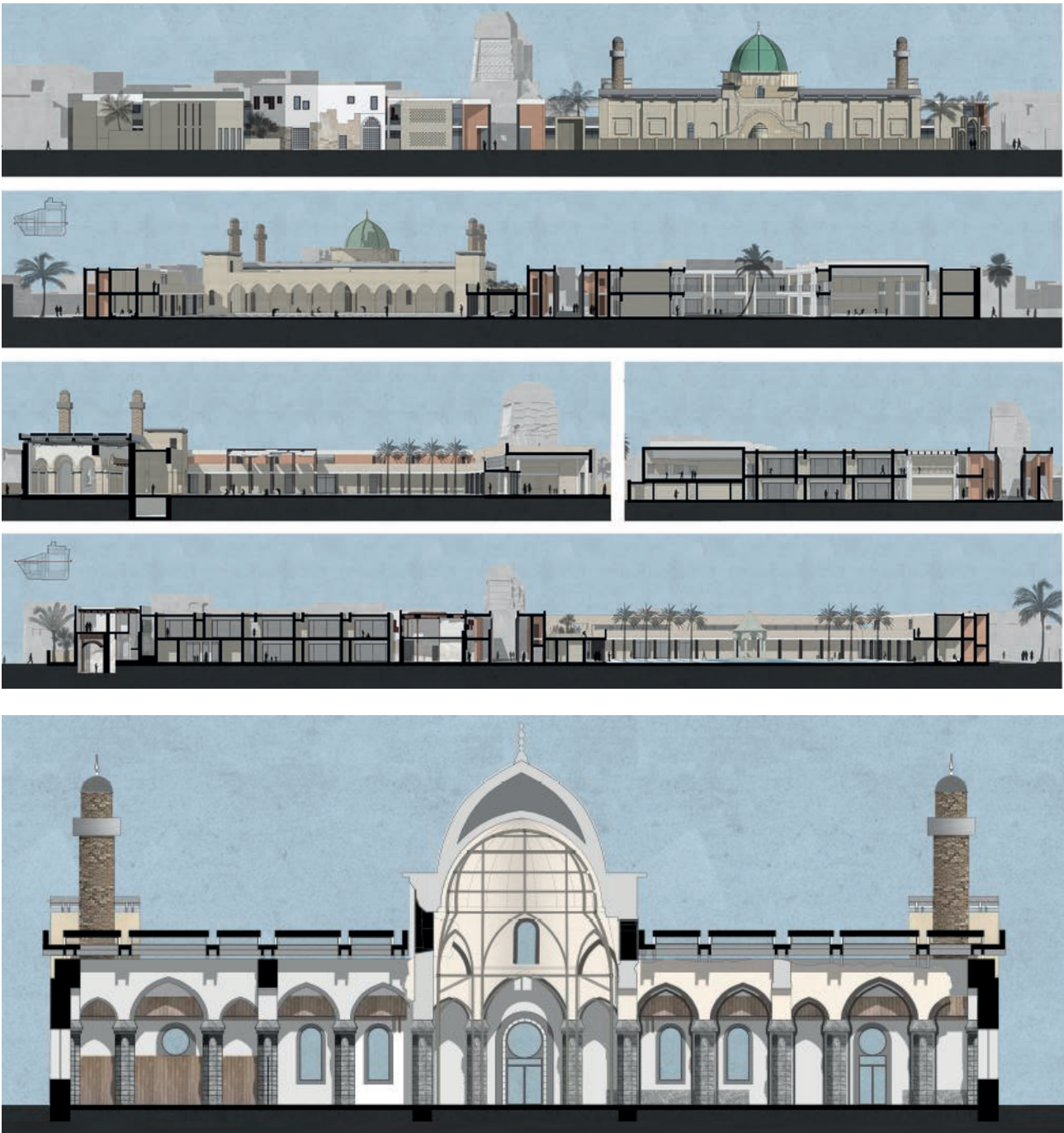
\*UNESCO International Competition for the reconstruction of the Al Nuri Mosque, plan.



the physiological transformation of the whole complex. Following this methodological line, the project foresees the introduction of new structures and activities starting from the preservation of the morphological character of this specific context mainly characterized by a sequence of full and empty spaces as closed intervals in the organization of introverted spaces and cohort urban continuum of the historical city.

The proposed complex consists of a set of educational, public, and religious facilities organized according to a hierarchical system of courtyards. On a compositional level, the relationship of the orthogonal volumes with the existing buildings mediates between the monumental contrast of the worship building and the sought-after congruity with the forms of the surrounding urban fabric. The new structure confirms in an interpretative key the density that produces the typical figure-background relationships of the existing urban structure. The fringes between old and new structures are mitigated through the green system. The teaching facilities are housed in the western block organized on a two-story building where the common areas, classrooms and administrative offices are arranged around a courtyard capable of enhancing the emptiness of the collective space as the fulcrum of the composition of the different volumes. On the western side of the area there is a building for sports activities which houses spaces for different types of indoor activities. A system of paths at different heights allows free circulation of the entire complex, emphasizing the sense of unity between the different functions housed. The existing structures are gathered around the school structure, housing the library and cafeteria, while remaining structurally distinct from the rest. The entire educational complex is divided from the eastern block by a multi-level open pathway, a large Stoà evoking the way the monumental colonnade adapted and transitioned into the structure of the Suq. The elements are organized by a sequence of retail spaces arranged within an alleyway that acts as foreshortening and leads towards the monumental ruins of the existing minaret.

The Mosque is at the heart of the project. The proposal was conceived as a major rewriting of the essential layout of the building destroyed by bombing so that the priority objective was a critical reconstruction in reinterpreting the existing parts preserved with scrupulous care in redefining through a clear perception of separation between the new spaces designed and those recovered. Conceptually, the design actions tend to enhance the presence of



**Figs. 14-15**

\*UNESCO International Competition for the reconstruction of the Al Nuri Mosque, sections and elevations; section on the mosque building.

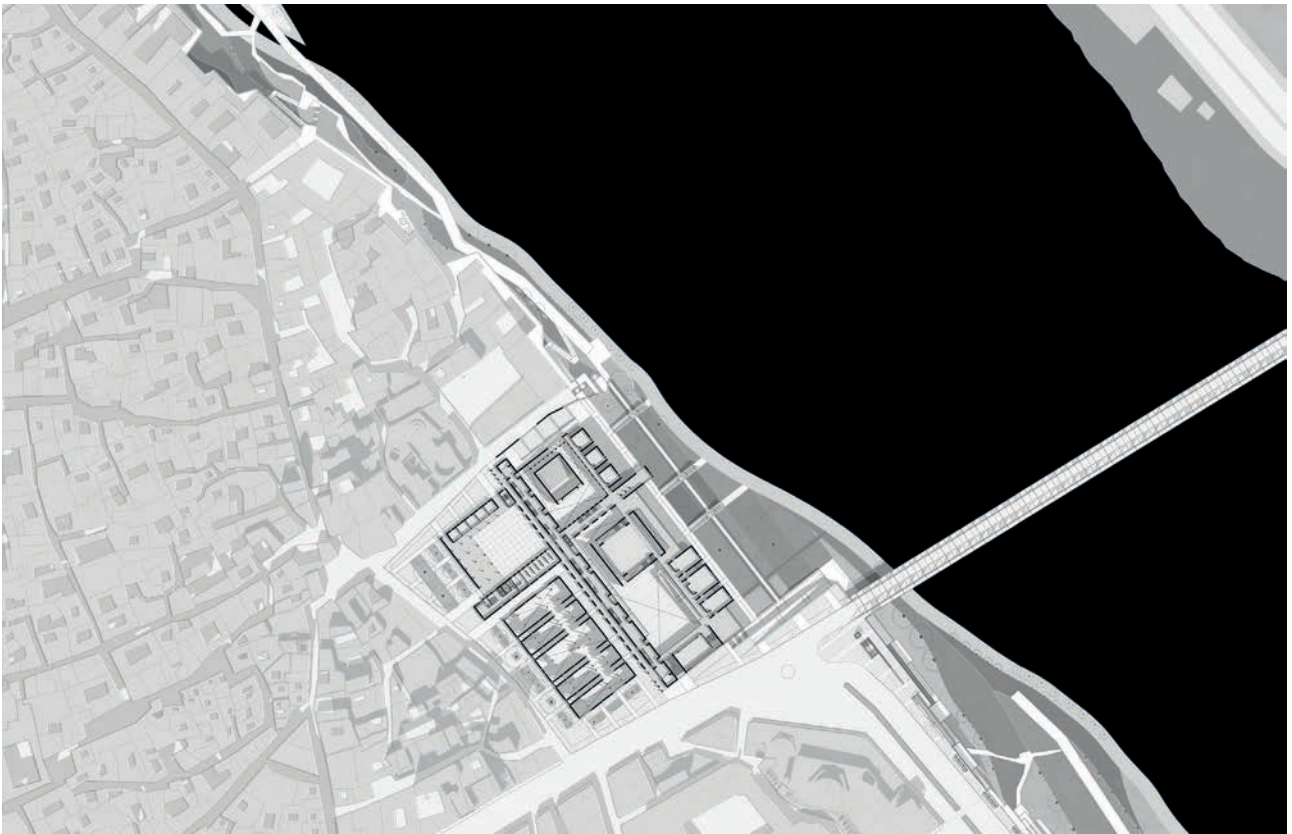


**Fig. 16**  
\*UNESCO International Competition for the reconstruction of the Al Nuri Nuri Mosque, bird's eye view of the complex.



**Fig. 17**  
\*UNESCO International Competition for the reconstruction of the Al Nuri Mosque, view of the Al Hadba minaret.

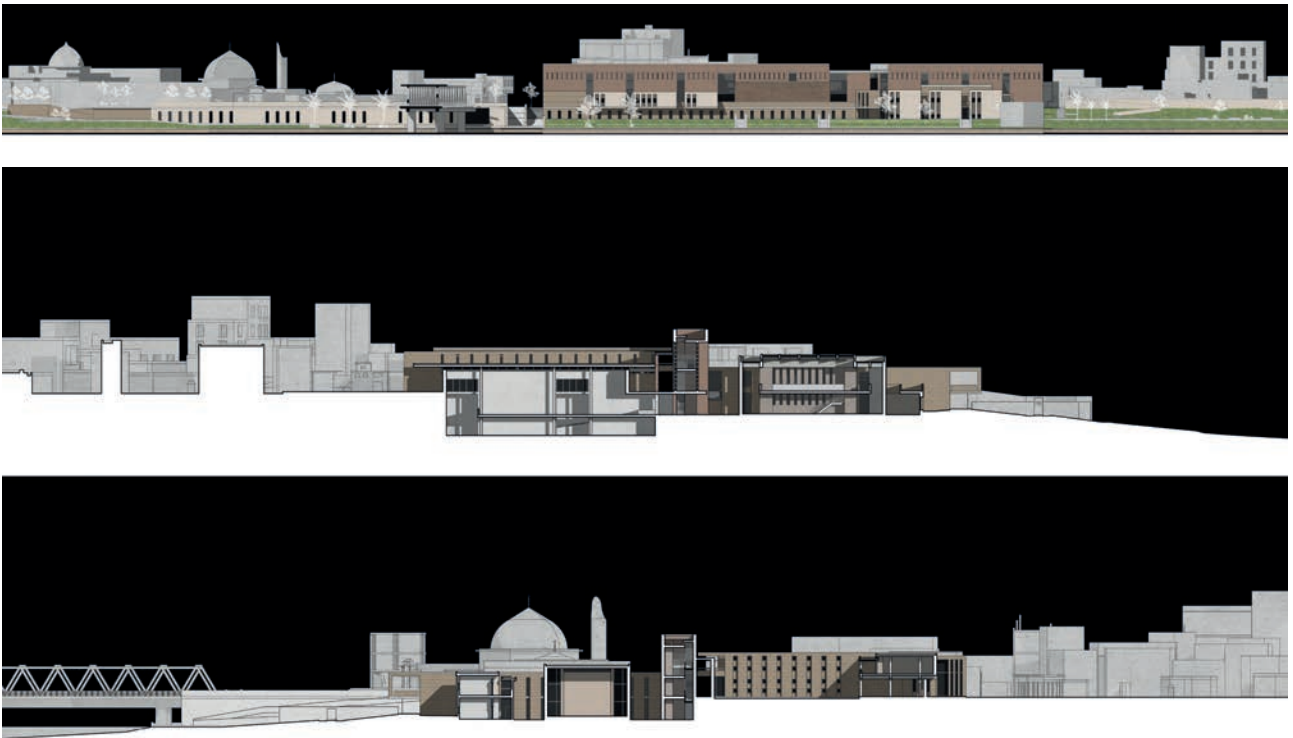
\* Working group: D. Chizzoniti (group leader), H. Pessoa Pereira Alves, Q.Wang, F. Menici, A.Salihbegovic, Y.Batkova, E.Marueli, T.Lolli, A.Abdelhafez, NBMelo, V Dogari, RAKhatibani, RTLallemant, Z.Ma, R.Mishieva, S.Qiu, GMScotto, Y.Shi.



**Fig. 18**  
Citadel Museum, floor plan.  
Dogari - Bello Melo - Master  
Degree Thesis , Politecnico di  
Milano, July 2021-Supervisor  
D.Chizzoniti].

the monumental architectural relics that survived the bombings (the main body of the mosque, the large prayer hall, the central dome, the colonnade behind towards the garden, the ablution pavilion) through a perennially conceptual structure that places the relationship between the historical presence and the new intervention not in terms of opposition, but as a discretely composed unity, where the composite whole of different eras is revealed. The design of the greenery has been conceived according to two distinct principles. The concept of the Islamic Garden was revisited and used as the theme of the large prayer courtyard. It has been interpreted as a forest of date palms growing among a dense network of water channels flowing towards a central basin. In this basin is the monument surrounded by waterspouts. The other green areas were conceived as shady gardens where one could protect oneself from the hot climate, to find in prayer the tranquillity necessary for contemplation and meditation. The garden of Al Nuri's tomb was conceived as a special episode, a "hortus conclusus" capable of enhancing the symbolic role of the founder's tomb.

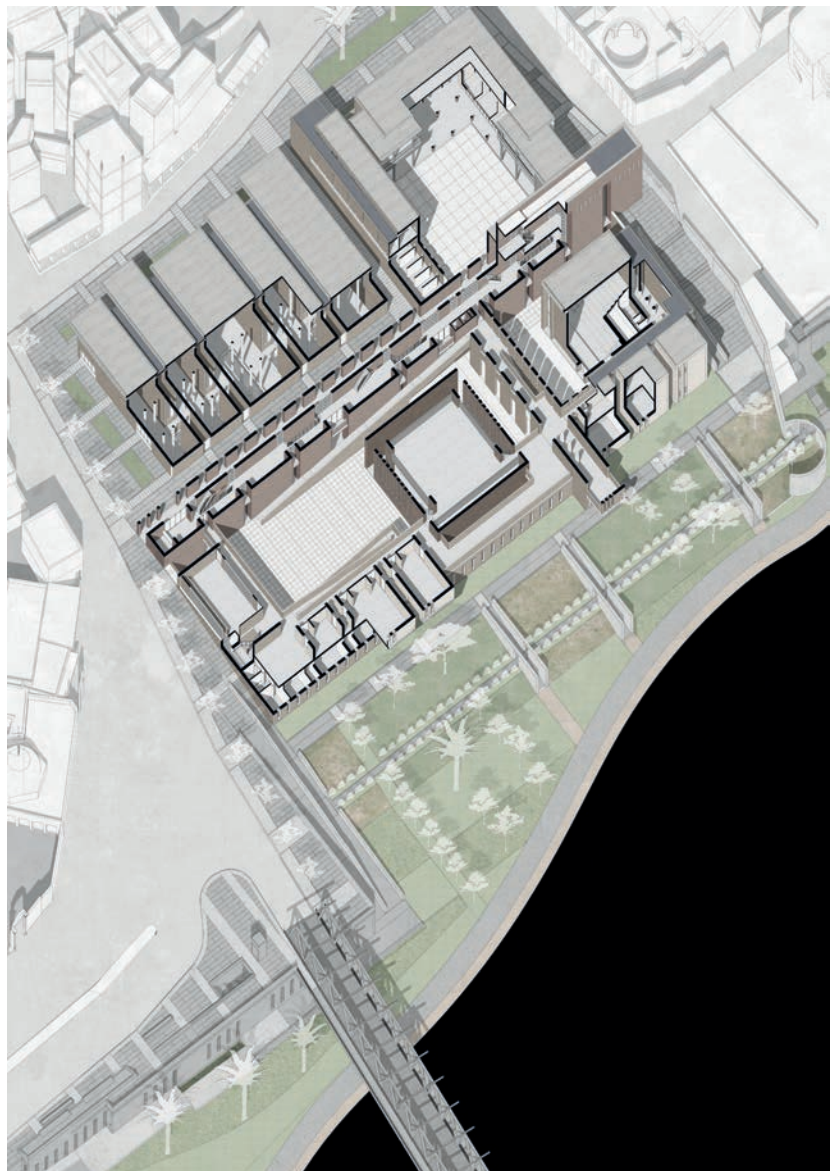
In this sense, the value of the project is linked to the recognition of the deepest sense of the place, the context, the city, through the authentic enhancement of all the components of the architectural space, giving a concrete meaning to the figuration, as iconographic substance, and as iconological value. In such cases, the role of architectural design is also to preserve absence by creating new conditions for the affirmation of authentic ideas. The basic idea behind this thesis is to operationally reconstruct the relationship between narrative structure – capable of representing absence, what was and is now only present as memory – and architecture.



**Figs. 19-20-21**

Citadel Museum, elevation from the Tigris River; sections; axonometric cross section.

[Dogari - Bello Melo - Master Degree Thesis , Politecnico di Milano, July 2021-Supervisor D.Chizzoniti].



## Notes

<sup>1</sup> Palimpsest, a term adopted by Swiss professor André Corboz from medieval parchments, which were scraped and rewritten several times, but on which traces of the past remained. André Corboz, *Il territorio come palinsesto* in Casabella no. 516, September 1985, pp.22-27.

<sup>2</sup> The procedures of generative grammar suggest that a written text, and more generally any syntagmatic element, a union of meaning and signifier, can be transformed into a second syntagmatic element, starting from a critical reorganisation of the units of which it is composed. This critical process is called rewriting. The same happens in architecture when the criterion of revitalisation prevails over the exclusive criterion of conservation of the historical artefact. That is, when an act of transformation (re-construction, re-forming, re-organisation, etc.) is the result of a critical re-elaboration of the formal characteristics belonging to something previous.

<sup>3</sup> Marcel Poète, *Introduzione all'urbanistica*, Einaudi, Torino 1958; Pierre Lavedan, *Geographie des villes*, Gallimard, Paris, 1959; Aldo Rossi, *Architettura della città*, Marsilio, Padua, 1969.

<sup>4</sup> Recognising Dedalo's patronage of architecture is a fact linked to the profound structure of the creative experience of the project. Daedalus proposes to sensitively experience the difficulties of the labyrinth through the body in space. The same wisdom of Theseus moves in the labyrinth the thread that would have saved him from the intriguing mesh of the unexplored paths.

<sup>5</sup> Renè Thom, *Predire n'est pas expliquer*, Flammarion, Paris, 1991, p. 132.

<sup>6</sup> Manfredo Tafuri, *Il frammento, la "figura", il gioco. Carlo Scarpa e la cultura architettonica italiana*, in F. Dal Co, G. Mazzariol (eds.), *Carlo Scarpa. Opera Completa*, Electa, Milan, 1984, pp.72-95.

<sup>7</sup> Quote written by the Latin grammarian and commentator Servius Marius Honoratus (4th-5th century AD) at the end of the Aeneid.

<sup>8</sup> See, Françoise Choay, *Le città. Utopias and realities*, 2 vols., Einaudi, Turin 1973; Lewis Mumford, *La città nella storia*, Castelvechi, Rome, 2013; Adriano Olivetti, *Città dell'uomo*, Einaudi, Turin, 2001.

<sup>9</sup> In the documentary "Pasolini e la forma della città", broadcast on 07/02/1974, the writer and director Pier Paolo Pasolini explains to Ninetto Davoli the reasons why he chose to film the town of Orte with his camera to comment on the theme "the shape of the city"

<sup>10</sup> Roberto Chiesi, *La realtà violata. Annotazioni su Pasolini e... La forma della città (1973-74)*, "Libero. La rivista del documentario", no. 4, 2006,

<sup>11</sup> Henri Lefebvre, *Urbain (L')*, in Id., *Le retour de la dialectique. 12 mots clefs pour le monde moderne*, Messidor, Paris 1986, p. 160.

<sup>12</sup> These different notions designate the double tendency of social space towards concentration and (peripheral) extension. All this is independent of the concrete urban reality, which is so multiform that it is impossible to establish authenticity: "city" is "civitas", linked to a Sanskrit root, while "urbe", is probably linked to "orbis", in an inclusive sense; "polis" is linked with the Sanskrit "pur", in the sense of fortress; but there are also the Germanic "stad", enclosures and fortresses such as "town" and "grad".

<sup>13</sup> Henri Lefebvre, *Space and Politics. The Right to the City II*, Ombre Corte, Verona 2014.

<sup>14</sup> David Harvey, *Rebel Cities. Urban movements from the Paris Commune to Occupy Wall Street*, Il saggiatore, Milan, 2013.

<sup>15</sup> Salvatore Settis, *Come è bella la città di qualità*, in "Il Sole 24 ore", Sunday 3 June 2018.

<sup>16</sup> Richard Sennett, *Il declino dell'uomo pubblico*, Bompiani, Milan, 1982, p.136.

<sup>17</sup> See Walter Benjamin, *Il dramma barocco tedesco*, Einaudi, Turin, 1999.

<sup>18</sup> See Guido Canella, *Conservazione, Restauro, Rivitalizzazione, Reversibilità*, in *Ananke*, no. 38, March 2003, pp.101-104.

<sup>19</sup> See Ernesto N. Rogers, *Il problema del costruire nelle preesistenze ambientali* (The problem of building in environmental pre-existences), report given to the Comitato Nazionale di Studi dell'INU chaired by Prof. Giuseppe Samonà, Rome 23 March 1957 and published in *Esperienza dell'architettura*, Einaudi, Turin, 1958, pp. 311-316.

<sup>20</sup> See Marta Bellingeri, *Questa è una città dove la gente vive*, (This is a city where

people live), in *Panorama*, no. 32, July 2008... Still in the old city, the great church of the Dominican Friars, Our Lady of the Hour, which also houses a convent and a large library, is partially destroyed: for three years its underground level and crypt were used as a military training camp; militants from all over the Middle East, indeed from all over the world, slept there. Finally, the great pride of the citizens who study archaeology and art history, here is the old Jewish quarter of Mosul, already in decline over the last sixty years, after the departure of many Jews from Mosul to Baghdad or Israel. In the half-destroyed and abandoned houses one can clearly recognise the characters of the Hebrew language, engraved on the walls and also on the structure of the Synagogue. «This ancient synagogue was the subject of my dissertation», says Laila Salih, a Baghdad University graduate in archaeology. «We have to do everything to preserve it». Together with fellow geologist Faisal Jaber, they have been trying to monitor monuments and archaeological areas in and around Mosul since the first months of the liberation. «Until churches and mosques, synagogue and historical houses are restored, Mosul cannot come back to life. The history of Mosul and the tolerance, multi-confessionalism and openness of its inhabitants is written on these walls, not on the blood that was shed on the banks of the Tigris», says Jaber, who lived abroad for years and has now returned to take care of his decimated city.

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Anna Irene Del Monaco  
**Rebuilding Puerto Rico after Hurricanes Irma and Maria.  
The resistance of the suburban settlement culture in the  
Caribbean**

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Abstract

This short study documents a summary of the cultural and technical debate on ‘reconstruction’ developed in recent years in the specific context of Puerto Rico, following the environmental and economic disaster caused by two successive hurricanes on the island in 2017, Hurricane Irma and Hurricane Maria. The design interventions and long-term visions promoted through an initiative, Puerto Rico Re\_Start, led after the disaster by the University of Florida, with the support of the main local universities, and the housing solutions developed by the most culturally active architects of the island, show that the typically American suburban settlement culture, despite the evident risks, continues to be the preferred choice of Puerto Ricans. The text also highlights, through reference to some field studies carried out by a Sapienza University team within the initiatives of the University of Florida, the insufficiency of the suburban settlement model compared to the mobility system and the means of transport most commonly used on the island.

Keywords

Caribe — Climate Change — San Juan

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**Rebuilding between policies and business**

‘Rebuilding cities’ and ‘restructuring territories’ is one of the activities practiced by mankind following war events or environmental disasters, and has often corresponded in the history of civilizations to an act of political affirmation aimed at restoring order and security conditions. In modern times, in particular, ‘rebuilding’ has corresponded to the implementation of actions defined by political programs managed through technical and cultural tools whose effectiveness can be distinguished on the basis of the historical moment, the geographical context and the level of technological and technical knowledge.

This short study documents a summary of the issues surrounding the ‘reconstruction’ debate promoted by Martha Kohen of the University of Florida with the University of Puerto Rico and the Polytechnic University of Puerto Rico in recent years<sup>1</sup>, following the environmental and economic disaster caused by two successive hurricanes that hit the island in 2017, Hurricane Irma and Hurricane Maria (Fig. 1).

Puerto Rico, in particular, is an interesting case study also for introducing and documenting some aspects of contemporary design culture that are particularly widespread in countries affected in recent years by the effects of *Climate Change*, where the climate is basically tropical. With respect to this type of issues, which require very different and integrated skills, not many years ago the prerogative of engineering and environmental disciplines, significant institutional changes have taken place in many schools of architecture in the United States of America. On the basis of guidelines defined by national and federal governments, connected above all to funding opportunities, academics and architects, who until a few years earlier



**Fig. 1**  
Puerto Rico, San Juan, 2018  
(Photos by A.I. Del Monaco).

were directing academic structures or courses applied to urban design and landscape (Amale Andraos, Kate Orff of Columbia University in the City of New York), have directed their expertise to the problems and effects of Climate Change. Moreover, geologists, environmental engineers, agronomists, in fact, have established themselves as landscape professors (Katherine Hill at Virginia Tech and UC Berkeley) having emerged the need to hybridize curricular profiles and to systematically tackle complex problems; some *professors of Architecture*, – of architectural and urban design as they would be defined in Italy – (Martha Kohen, Nancy Clark, Jeffrey Carney of the University of Florida) have begun to promote fields of research on issues such as *Sea Level Rise*, *Built Environment Resilience*, etc., that is, issues considered priorities at the political level. Problems with respect to which even the local construction industry, considering the recurring environmental disasters and the trend of the real estate market, could no longer fail to be appropriately addressed by academic research.

However, if in the Anglo-Saxon countries, *Climate Change* is at the top of the political agendas, in recent months the European Commission has promoted the *Green New Deal* initiative, that is a set of political actions carried out with the aim of achieving neutrality in Europe climate by 2050. But this type of issues have interested the vast public and political debate for a long time, as evidenced by the works written by journalists and observers, particularly prolific in the USA: “If New York is the most advanced example of a metropolis that is redefining and restructuring itself to defend the climate, thanks to the commitment of the mayor [Bloomberg] in this sense, small and medium-sized cities such as Naperville and Santa Clarita testify that in the belly of America the collective need to become autonomous on energy is growing, managing to produce a quantity of resources from renewable sources capable of reducing the consumption of traditional fuels” (Molinari, 2012).

Even the reconstruction processes that affected Europe and Japan during the Second World War, which Mark Clapson defined in his essay *The Global Phoenix: from Destruction to Reconstruction 1945-60* (Clapson, 2019), involved politicians, central governments, architects, planners, public and private interests, companies and entrepreneurs, the vast public and the specialist public, and have identified in the construction of residences and lodgings the economic and social engine underlying the ‘promise’ of reconstruction. The United States of America contributed to the ‘reconstruction’ through reconstruction aid transferred to war-affected countries (such as the funds that financed the INA Casa program in Italy through the Marshall Plan), financing cultural diplomatic policy (Allais, 2018) on a global scale by supporting institutions such as World Heritage and UNESCO and the construction of homes for veterans and war veterans on their national territory.

What distinguishes the most recent cases of post-hurricane and post-earthquake “reconstruction”, which countries with high seismic risk have implemented after drastic events, compared to the cases of post-war reconstructions in European countries, is the recurrence of cycles natural events and therefore the elaboration of a planning thought oriented to prevention as well as to the immediate solution of the problem. In many cases it is a real reformulation of the disciplinary matrix of the academic and scientific communities that have found in the flexible nature of the architecture, city and territory project the possibility of elaborating a redefinition of terminology, methodology and operational objectives<sup>2</sup>.

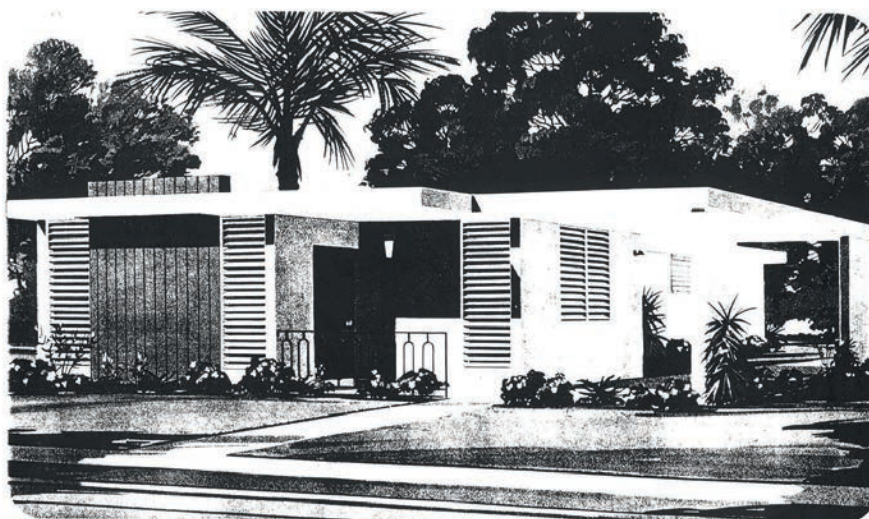
In addition to this, another fundamental aspect to consider, confirmed by the historical case history of the realizations, is the choice of the construction system and the type of settlement. Almost always, for these projects of a suburban or extra-urban character, the solutions oscillate – simplifying – between the construction similar to the Levittown type (Marshall, 2015) – 140,000 homes, industrially produced wooden structure – and that of INA-Casa (Corsetti, 2020; Di Biagi, 2001) – 355,000 dwellings, traditional masonry with the use of reinforced concrete in place -, both social residency programs launched in 1947 and realized in a few years and based on the principle of low-cost construction and the use of hands. non-specialized work.

The American interventions were implemented by the government according to an idea of a city that Lewis Mumford defined «a uniform environment from which escape is impossible» and that William Levitt considered in the context of industrial production: «We are not builders, We are the General Motors of the housing industry». The interventions of the INA-Casa Plan or Workers Employment Increase Plan, on the other hand, was «a maneuver aimed at relaunching the economy and employment, building economic houses, but also as a device of ‘institutionalized charity’ on a national scale, of participation solidarity of all social components towards the needs of the poorest» (Di Biagi, 2001).

### San Juan

In San Juan, the capital of Puerto Rico, a Levittown intervention was carried out in 1963 – one of the three floors (Pennsylvania, New Jersey, Puerto Rico) built directly by Levitt – in the municipality of Roa Baja, of which few “exemplary” dwellings survive. Mostly altered (Fig. 2). The old historic core of San Juan (Fig. 3), which dates back to the mid-sixteenth century, guarded and protected by a fortified citadel and walls, – today

**Fig. 2**  
Levittown, Puerto Rico, a brochure of houses' layouts "La diadema".



**LA DIADEMA**

*4 dormitorios, 2 baños, balcón, marquesina*

Mire qué belleza. ¿Verdad que invita a entrar? Millares de familias han soñado con esta residencia que ahora LEVITTOWN hace realidad. El espacio interior ha sido distribuido de modo que usted lo aprovecha todo con verdadera comodidad funcional. Sus bellos interiores se prestan para que usted la decore con gusto. El estilo "DIADEMA" tiene cuatro cómodos dormitorios cada uno con

amplio "closet" de puertas plegadizas, dos baños, sala, comedor, balcón y marquesina. El dormitorio principal tiene baño privado. A usted le encantará ésta casa. El estilo "Diadema" incluye también sin cargo adicional una moderna lavadora automática General Electric.



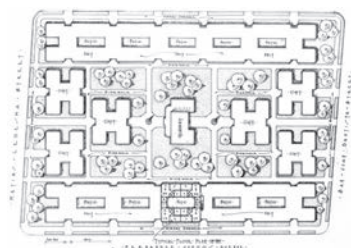
**Fig. 3**  
Old San Juan, La Perla outside the urban walls. 1952. ICP.

**Fig. 4**

Aerial view. Luis Llorens Torres Public Housing Project. San Juan, Puerto Rico. 1950's. Rafael Picó, *Diez años de planificación en Puerto Rico*, Junta de Planificación de Puerto Rico-1952.



the largest tourist and cultural center in the country with piers, airports and moorings for cruise ships – did not suffer major building damage after Hurricanes Irma and Maria. The traditional colonial-style building, as some scholars explain, – not very dissimilar from the constructive point of view to the INA-Casa interventions, were it not for the decorative elements and the vernacular references – was a strategy of the American government aimed at transmission, through the image of its architecture, of a precise idea of power: «In terms of architectural style, the Neo-classical and the Spanish Revival had been used by the American government as a symbol of its power and authority over its colonial territories» (Mignucci, 2014). But already from the 1940s and 1950s residential interventions inspired by the Siedlungen of German rationalism, multi-storey residential slats and individual house settlements in suburban neighborhoods were present in Puerto Rico (Fig. 4). This is due, in particular, to the presence of Walter Gropius and José Luis Sert<sup>3</sup> at the Harvard Graduate School of Design, one of the most frequented universities still today by young people of the Puerto Rican *élite*, to the involvement of architects such as Richard Neutra in the projects carried out. for the island, in particular fifteen school buildings for outdoor teaching activities, and the settlement models promoted by the political leaders appointed to head the island government (Rexfort G. Tugwell appointed by Roosevelt and Jesús T. Piñeiro da Truman) who they directed the general lines of urban growth.

**Fig. 5**

El Falansterio Site Plan, 1935. DTOP. Internal Courtyard. 1967. CRUV.

One of the significant building interventions carried out in those years, still inhabited, but unkempt, in Art Deco style (very common during the Roosevelt presidency) is the so-called *El Falansterio* (Fig. 5), not far from the colonial citadel and the airport for flights private.

In an interesting essay by Andrés Mignucci, Puerto Rican architect and lecturer, in particular, the reverberation of the CIAM congresses, the New Deal, etc., on the policies and construction projects started on the island starting from the 1940s, including the debate animated by a group of architects that also involved the younger generations, (Thomas Marvel, Jesús Eduardo Amaral, Efrer Morales, Horacio Díaz, Jorge del Río, René

Ramírez, who played an important role in the following decades), mentors of the current professionals in various capacities, in support of an architecture that attempted to express the values of the housing culture of the tropics and was not only an expression of the *white modernist style*<sup>4</sup>. A dialectic not unlike the one that began about a decade later in the context of post-World War II Italian architectural culture.

However, in 1956, despite the political guidelines and experiments proposed by the most active architects in Puerto Rico during the previous years, the Federal Aid Highway Act signed by President Dwight D. Eisenhower financed the construction of a highway network of approximately 66,000 km and started subsidy policies for the purchase of cars, as in all the United States of America, marking the country's "suburban" destiny and the gradual renunciation of the construction of public rail infrastructures. Nevertheless, in the years that followed, some attempts were made in Puerto Rico: in 1969, starting from projects drawn up by Toro y Ferrer for the construction of a Downtown, a *Nuevo Centro de San Juan*, a system of skyscrapers integrated by pedestrian bridges was built. and from an elevated "San Juan Tren Urbano", an oversized investment that is still underused today, a sort of incomplete model district. Because, as the enlightened Puerto Ricans claim, over time the island has become "a huge parking lot", effectively summarizing the outcome of policies that have deliberately renounced the possibility of building a public infrastructure system on rail, which would almost certainly have led different fate, as it has been in other Caribbean islands.

### **Puerto Rico Re\_Start<sup>5</sup>**

In October 2017, the University of Florida's School of Architecture based in Gainesville welcomed seven students and three teachers displaced from San Juan after Hurricanes Irma and Maria that hit the island consecutively. On that occasion Martha Kohen, academic partner of the UNESCO Chair in "Sustainable Urban Quality" of Sapienza, former dean of the school of architecture of Gainesville and Montevideo, with a group of professors from Puerto Rico and American academics launched the hypothesis to organize a cycle of project research (the fourth edition is scheduled for 2021) entitled Puerto Rico Re\_Start, aimed at producing addresses and guidelines to support the reconstruction process, involving local professionals, entrepreneurs, politicians, local public and private institutions in the comparison, etc. Puerto Rico Re\_Start 1 focused on the case of San Juan by exploring several urban and suburban areas damaged by hurricanes, among the poorest and most difficult to access; Puerto Rico Re\_Start 2 has developed a project for the north coast, in particular to the west of Puerto Rico, in places with potential tourist value and abandoned settlements; Puerto Re\_Start 3 dealt with the difficult case of the west coast, the least developed, object of interest for hypothetical developments in the tourism industry, already partially occupied by biotechnology industries. Puerto Re\_Start 4 (September 2021, tentatively) will apply to the study of the east coast and inland mountains. The research was carried out through collaborative workshops attended by Puerto Rican, American, Italian and other students (Erasmus and non-European mobility students at Sapienza University of Rome). Some of these themes have been explored after the workshop through degree theses or in the semester courses held by the various academic sites involved, and have been partially published (Canella, Del Monaco,

2018; Del Monaco, 2018).

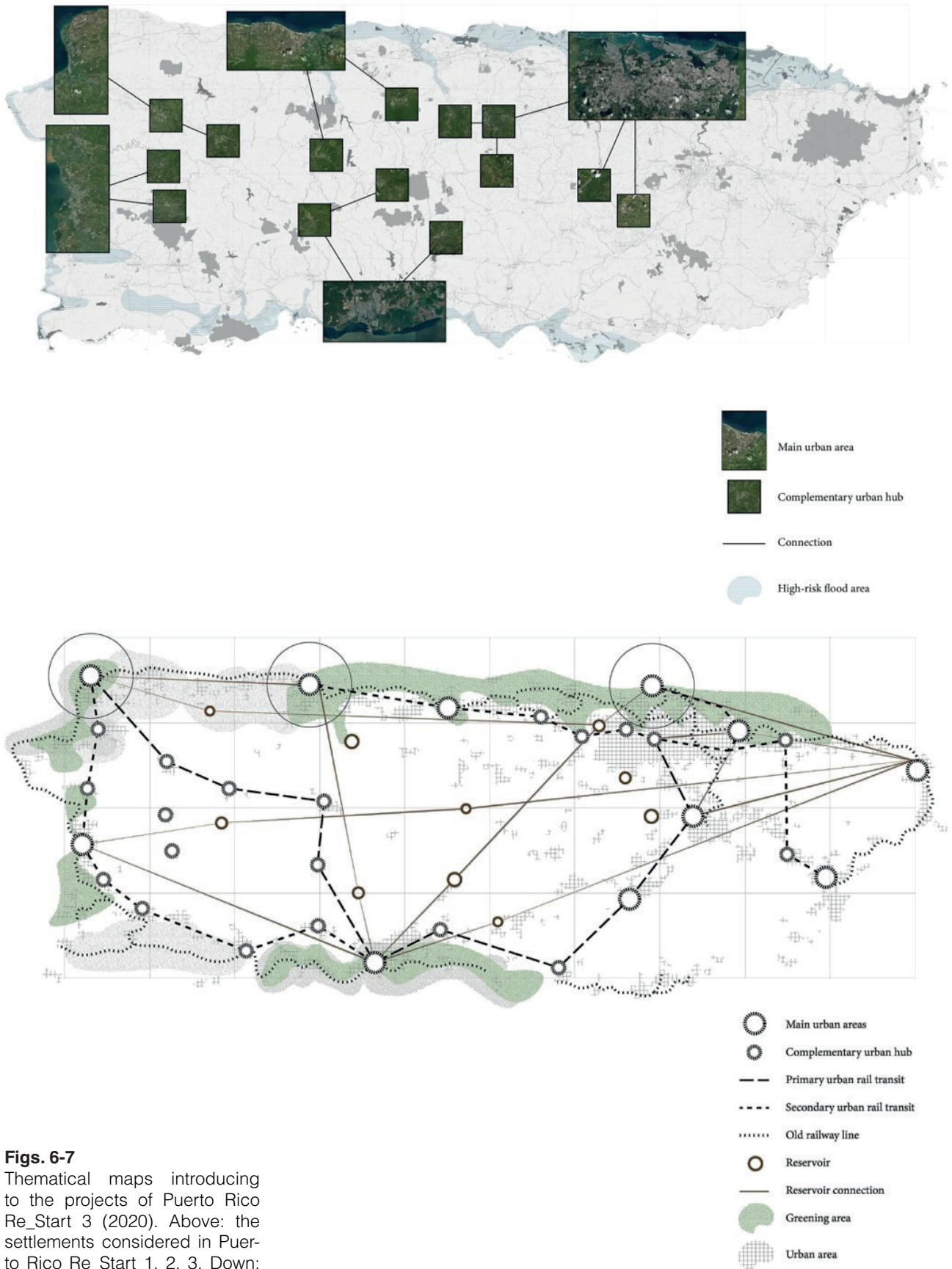
The third edition took place completely online in March 2020. For each edition, the Puerto Rico Re\_Start workshop was accompanied by a real study conference that took place at the end of the day. In particular, as Edwin Melandez, Director of the Center for Puerto Rican Studies at Hunter College in New York explained during his speech, that of Puerto Rico, after the hurricanes, resulted in a “devasted economy: in 2018 it was expected that the Gross Domestic Product would have decreased by 11.2 percent, which would have included 90 billion in damages, and 21 billion in insurance costs; 100,000 houses damaged, 80% of which almost destroyed ». In addition, the Puerto Rican economist highlighted the serious problem of exodus and depopulation: about 40% of Puerto Ricans after Hurricane Maria emigrated to the United States (Chicago, New York and Florida). So much so that today, considering the traditional migration of the younger generations to the US, two / thirds of Puerto Ricans live in the United States of America – they have an American passport, but do not vote for the president – and have left the island; more than half of the population receives a monthly state subsidy of around 600 euros with which they tend to survive. The actions taken by the federal government were aimed at “solving the problem of illegal residences, providing long-term medical help, reducing taxes (EITC, CTC)”. These data give quantitative consistency to the metaphor used by Lucio Barbera<sup>6</sup> in the closing speech of the Puerto Rico Re\_Start 1 workshop (2018) to describe the case under study: the island of Puerto Rico is a settlement affected by “Urban Anemia”<sup>7</sup>.

#### «Relocate Renaturalise Reconnect»

Sapienza’s contribution to the 2020 edition, Puerto Rico Re\_Start 3, led by who is writing and by the PhD tutor Matteo D’Emilio, proposed an intervention in the west of the island conceived in an integrated way with the rest of the territory and considering the studies elaborated during the edition 1 and 2: summarized under the title “Relocate Renaturalise Reconnect”. And he was partly inspired, as in the previous cases, in addition to the research directions defined by Martha Kohen and the Center for Hydro-Generated Urbanism for the scientific setting of the initiative, by the studies of Kristina Hill and other centers research projects that deal with similar project themes: «The best approach I know of can be simply described using three categories of actions: to protect, renew, and re-tool»<sup>8</sup>. The Sapienza group (six students from Tunisia, Romania, Indonesia, China and the Middle East, a teacher and a tutor) was given the task of studying the Aguadilla settlement by the organizers. The work took place with the times of an ex tempore managed online which lasted about three days. The proposed project actions can be summarized as it follows (Fig. 6-7).

**Relocate:** the coastal areas affected by flooding and hurricanes have posed the problem of relocating and move the inhabitants of the compromised coastal settlements to safer areas: one hypothesis could be that of the so-called “Complementarios” settlements (see Mapas Diagnosticos – Memorial del Plan de Uso de Terrenos della Junta de Planificacion, 2015), initiating an inevitable process of policies and incentives.

**Re-naturalize:** In particular, the settlements located at the foot of the internal hills could be the most favorable for reorganizing the territory, concentrating new and safer tourist facilities in the coastal area, reorganizing



**Figs. 6-7**

Thematical maps introducing to the projects of Puerto Rico Re\_Start 3 (2020). Above: the settlements considered in Puerto Rico Re\_Start 1, 2, 3. Down: the metropolitan railway network (primary and secondary), the water reservoirs, the areas to be re-naturalized, the areas suffering of flooding.

the agricultural sector (including that of the agritourism) both in the plains and in the hills in a more efficient and updated way.

**Reconnect:** to implement the aforementioned program it is proposed to build a new infrastructural railway network. Two light rail systems (primary and secondary) and a cableway useful for the connections of the internal settlements located on the hills and in the internal mountains that would be densified after the transfer of the inhabitants from the coast.

Instead of proposing the reuse of the railway line, now disused, which served the sugar cane plantations and which runs along the border of the island (an obsolete infrastructure), the proposed scheme provides for the implementation of a major metro line primary that connects San Juan to Ponce and Ponce to Aguadilla, following a “V” pattern, for a total length of almost 170 km – an overall realistic investment. The primary rail line could be supplemented by a secondary rail line and a network of cable cars powered by the energy production of the internal reservoir system (which could be upgraded and reused where it is inactive). The new integrated mobility system could attract different types of investors and give rise to a higher standard of quality of life, capable of attracting new inhabitants, both the elderly to live on the island of Puerto Rico in favorable climatic conditions or the youngest to start their business in a context that requires new energy and innovation with the support of oriented subsidies.

The integrated mobility system could favor different types of tourism (excursion, short stops during cruises) and to promote new forms of tourism in inland areas, linked to the rediscovery of local food products, fruit, agriculture, etc., considering that the most food products, including those of agricultural origin, despite the excellent climate, are currently imported.

The general objective envisaged is to maximize the effect with limited interventions, creating diversified infrastructures, increasing the value of the land, the degree of safety, the standard of living, creating the conditions for a new type of productive activity and encouraging employment.

### Provisional conclusions

The experience shared during the Puerto Rico Re\_Start initiative made it possible to verify, by studying a realistic story, how much, despite the possibility that emergency and danger conditions recur<sup>9</sup> – a category that some experts distinguish from risk – the identification with a certain type of settlement culture is a factor of resistance in the cultural identity of Puerto Ricans. Despite the obvious risk of living in single-family homes of the *steel frame structure* type, great-grandchildren of the Ballon Frame system and the Levitt system, especially poorly built and located in areas at risk. Many of the inhabitants of Puerto Rico, even those who belong to social classes in difficulty, do not give up the myth of the single-family house, but refuse to keep in order and cultivate a garden or vegetable garden which, given the climate, would be very simple to cultivate by integrating your family manager. The widespread unease among the inhabitants, as well as economic, is evidently also social: the weakest population remained on the island (by age and wealth). The most prominent architects in Puerto Rico, an integral part of the American architectural cultural élite, such as Jonathan Marvel<sup>10</sup> (Fig. 8) and Francisco Javier Rodríguez-Suárez, illustrated some projects drawn up by their offices and their students for reconstruction: elegant and refined prefabricated individual houses that correspond

**Fig. 8 a**

Resilient Power, Puerto Rico, Marvel Architects.  
<https://marvelarchitects.com/work/resilient-power-puerto-rico/100>

**Fig. 8 b**

Houses Designed To Help P.R. Survive Future Storms, Marvel Architects. Beyond the architectural solution, too schematic for some aspects, one of the technical aspects that we tried to affirm in the debate on reconstruction is the use and distribution of photovoltaic panels. The island, after the hurricane, remained several days without electricity, internet access, completely isolated. But buildings so small in size and light are not able to resist anchored on the ground to the passage of a hurricane; the same problem applies to photovoltaic panel systems.

to the idea of transportable temporary housing, also on wheels, relatively low cost, energy self-sufficient. Not much seems to have changed since Mr Levitt argued: «We are not builders, We are the General Motors of the housing industry»! Among other things, the «Tiny House Movement», «an architectural and social movement that encourages living a simpler life in a smaller space», as explained by an article in the Financial Times last May, whose success returned in 2008 with the crisis financial, but more recently with a Netflix series *Tiny House Nation* (Chen, 2020), demonstrates that the preference for this type of residential solution is not just a phenomenon for *dropouts* but the solution that affects millions of followers on the Instagram link, with about 1 , 47 million posts, linked to the hashtag #tinyhouse.

And it is for this reason, therefore, that the solutions proposed through the design exercise developed in recent years by the UNESCO Chair of Sapienza for Puerto Rico, have tried to support the *resistant* adherence of most of the local inhabitants to the suburban settlement model, which many scholars attribute to the timeless success of *Walden* by Henry David Thoreau, an indispensable cornerstone for American cultural identity (Updike, 2004), just as it took root on a Caribbean island where the Hispanic culture lives hybridized to the North American one. So as to return to consider the hypothesis of building infrastructures on iron and reversing the interpretation of the urban functioning of San Juan: from a historic-colonial center surrounded by a suburb to a metropolitan city of about 500,000 inhabitants – therefore quite similar to a city like Palermo – with a tourist center on the water.

The overall intent was to try to include in an idea structured for long-term interventions, thinking about the strengthening of rail infrastructures within a framework of economically eligible interventions, the address of local technicians, who instead tend to sell low-cost solutions and fast mass distribution, continuing to fuel the suburban single-family residential model.

## Notes

<sup>1</sup> In particular, Puerto Rico is a Caribbean island located in the Atlantic Ocean, it was a colony of the Spanish crown and since 1898, after the Hispanic-American war, it has become an unincorporated territory of the United States of America.

<sup>2</sup> It is now well established that contemporary society from the mid-1980s onwards is considered *The Society of Risk*, as the work of Ulrik Beck anticipated and explained.

<sup>3</sup> The works of J.L. Sert all'Havana (Cuba) in South America influenced strongly the architectural culture of Puerto Rico.

<sup>4</sup> Mignucci A. quotes José Fernández, *Architecture in Puerto Rico*, (New York: Architecture Book) Publishing, 1965, p. 134, 240.

<sup>5</sup> <http://puertoricorestart.org>

<sup>6</sup> Lucio Barbera, chairholder dell'UNESCO Chair in "Sustainable Urban Quality and Urban Culture, notably in Africa" of Sapienza took part with Italian professors and students to three workshops in Puerto Rico Re\_Start as academic partner of the University of Florida.

<sup>7</sup> See Lucio Barbera's Twitt #urbananemia: "human settlement physically and functionally appears to be still in a good state but the demographic, social, economic and cultural resources are in a continuous silent decrease. The first symptoms of URBAN ANEMIA is the necrosis of marginal settlements" UNESCO;

<https://twitter.com/hashtag/urbananemia?src=hash>

<sup>8</sup> Interview with Kristina Hill, <https://www.asla.org/ContentDetail.aspx?id=28548>

<sup>9</sup> «... Risk is the form that a danger takes when it is transferred into the sphere of what can be administered. Nature is full of dangers, but it is modern technology that tends to represent them as risks, for example by quantifying their probability and attributing a cost to them.», Raffaele Alberto Ventura (2020), *Radical choc: Ascesa e caduta dei competenti*.

<sup>10</sup> Marvel Architects; <https://marvelarchitects.com/work/resilient-power-puerto-rico/100>

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Bruno Barla Hidalgo

**Earthquakes as a force that rebuilds.**

**Three South American proposals (two from the past, one a contemporary utopia) and reflections on their meaning**

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Abstract

This essay was written by a South American architect who has made the relationship between architecture and poetry<sup>1</sup> a fundamental way of life in his work. For this reason, in the text that follows, the poetic word appears together with the written text and anticipates reflections on the territory, earthquakes, the projects carried out, and some utopian projects which will be discussed. There are four main themes: 1) The South American continent facing the Pacific Ocean; 2) The churches of southern Chile and the possibility of an architectural reconstruction thanks to the presence of a new liturgical act (1960); 3) The port of Valparaíso with a new layout after the earthquake (1906); 4) Santiago-Valparaíso, towards a “happily habitable” city-region, or how we can inhabit this land that never stops trembling (2020). As an epilogue, a reflection on the “Sign” of contemporary art dealing with earthquakes (Athenea in Santiago de Chile, the *Cretto di Gibellina* in Sicily, and the *Terrae Motus* collection in Naples).

Keywords

Sign – Light – Gazes

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*Si no sabes dónde vas nunca sabrás si has llegado*  
Lewis Carroll

### **1. The South American continent facing the Pacific Ocean**

We begin this essay by poetically observing the South American edges<sup>2</sup> of this Pacific Ocean, a new and enormous “Mare Nostrum”.

We can help ourselves with the epic poem *Ameréida* to understand this reality, in the following lines from the poem:

*América<sup>3</sup> fue querida y ocupada por sus bordes (p.17)*  
[America was desired and occupied along its borders] [ref.1]

*Vivimos al borde frente a cuanto no cobra transparencia de realidad en nuestras propias existencias (p.18)*  
[We live on the edges in front of what finds no transparency of reality in our lives]  
[ref.2]

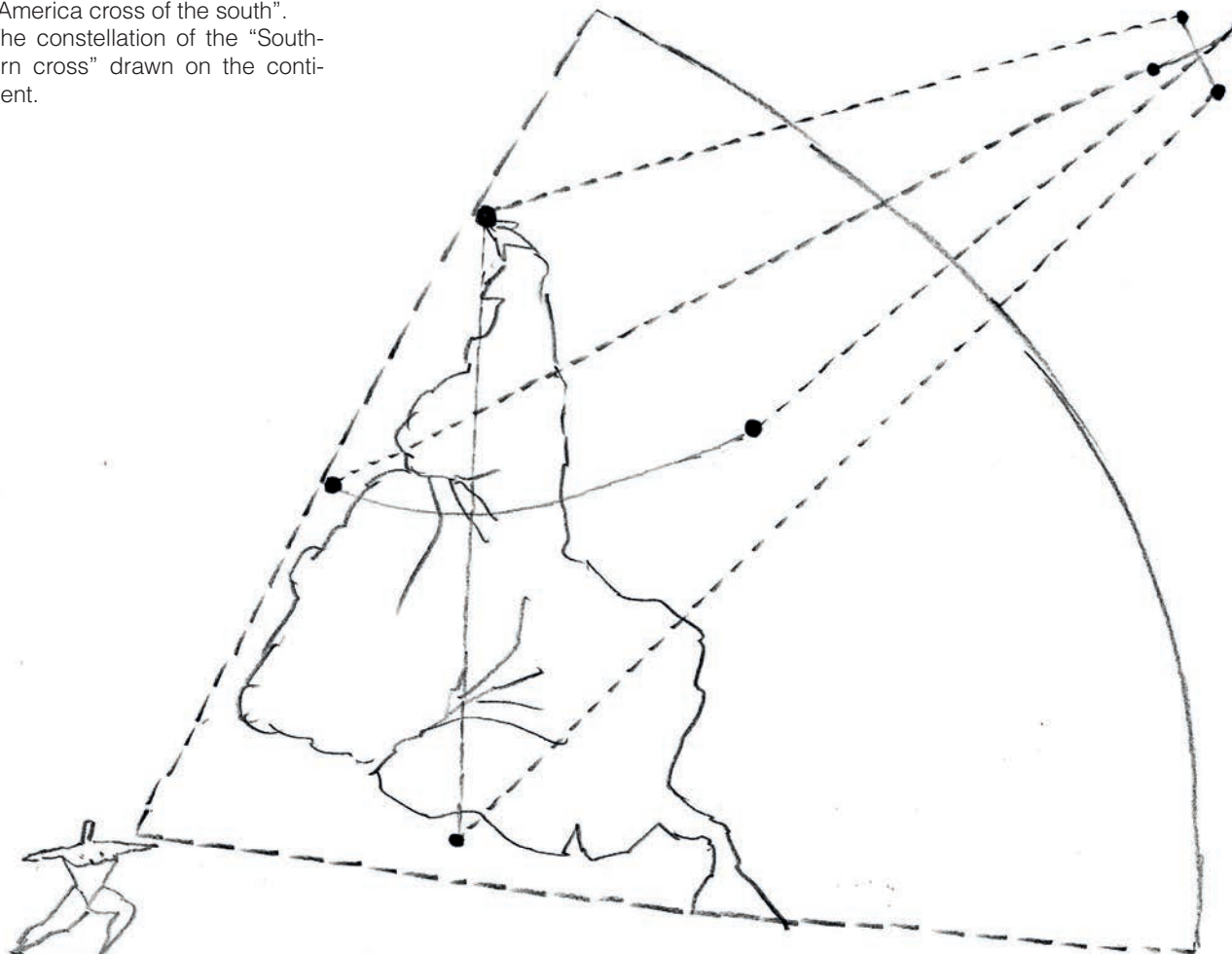
*Que heredamos amanecidos en este borde? (p.26)*  
[What do we inherit by waking up on this edge?] [ref.3]

*Heredamos esta capacidad de desconocido (p.27)*  
[We inherit this capacity of the unknown] [ref.4]

“Unknown”: we live in front of an unknown continent and an unknown sea; we are faced by a huge “abyssal” land, and a huge unexplored sea which opens us up to adventure<sup>4</sup>. [ref.4]

**Fig. 1**

“America cross of the south”.  
The constellation of the “Southern cross” drawn on the continent.



Let us continue listening to the poetic word:

*Entonces aparece lo abisal ¿cuándo lo abisal? Cuando el país de los ojos lo vigente por visible se separa abruptamente de lo que asientan los pasos y el pasaje América es abisal surge como un monstruo para nosotros y un impedimento para el pasaje (p.158)*

*[So the abyssal appears when it is abyssal? When the land of the eyes, the currently visible, is radically separated from what our feet establish and the passage of America is abyssal, it rises like a monster for us and hinders our passage] [ref.5]*

The continent of America (was) a gift for a Europe which was looking for the East, and then, in the middle of its journey, a new continent suddenly appeared: America. Columbus never knew he had arrived in an unknown land<sup>5</sup>. [ref.4]

### 1.1 The South American continent: the hinterland cities and the sea ports

The Spanish colonial project was to locate cities on the South American continent, not along the coast, but slightly inland<sup>6</sup>. As a result, Santiago de Chile was born inland and, by the sea, the port of Valparaíso was built. This populating of the continent, which took place mainly along its margins, meant that its centre was uninhabited<sup>7</sup> [ref.1] an “Inland Sea” as a reality to be contemplated, something present in the habitation of this continent. [ref.2] The poem names it: An “Inland Sea”, not to be thought of from the point

**Fig. 2**

“Inner Sea”.

Large depopulated space,  
where what the eye sees, the  
pass cannot reach.



of view of conquest and human settlement, but as a poetic reality inspiring reflection. [ref.3]

If, as Rimbaud said, poetry comes before action, listening to it allows us to think in a way which opens us up to a creative field.

We, the inhabitants of the edges of this continent, are the result of a racial cross between native peoples and European migrants, who still cannot understand one another today<sup>8</sup>. [ref.6] *Amereida*'s poetic word says:

*América regalada ¿se ha aceptado a si misma?*<sup>9</sup> (p.15)

[Did America accept itself as a gift?] [ref.6]

*Nuestra raíz no está preñada de su hoyo, nuestro apoyo esta en los aires vasto como la residencia de los pájaros*<sup>10</sup> (p.46)

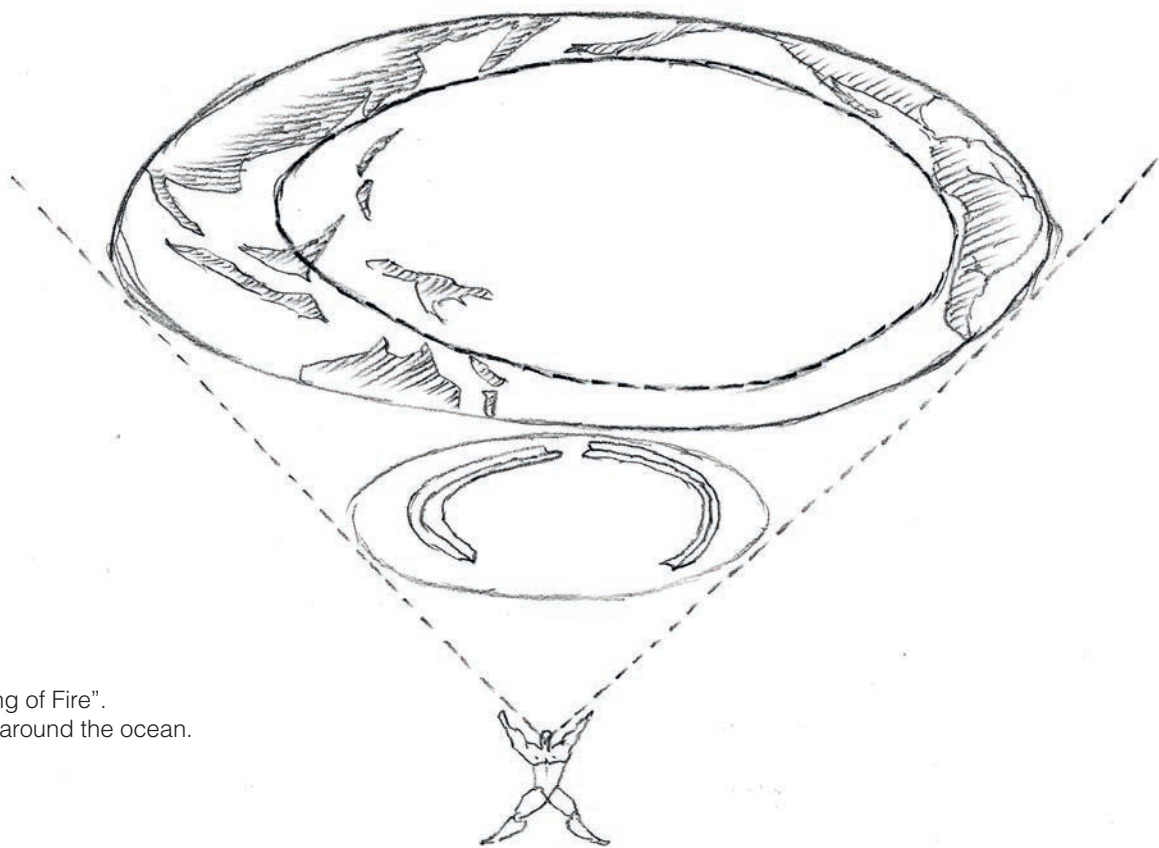
[Our root is not nourished by its hole, our support is in the air, as vast as the home of the birds] [ref.7]

Here the poetic text is for us South American architects who listen to the poem “clarifying” our roots in this America, in the air. [ref.7]

Why is it important to bring the poetic word into a text that talks about earthquakes? Because it speaks of this land we inhabit, which we hardly know on the surface and even less in depth, where the earthquakes begin. [ref.4]

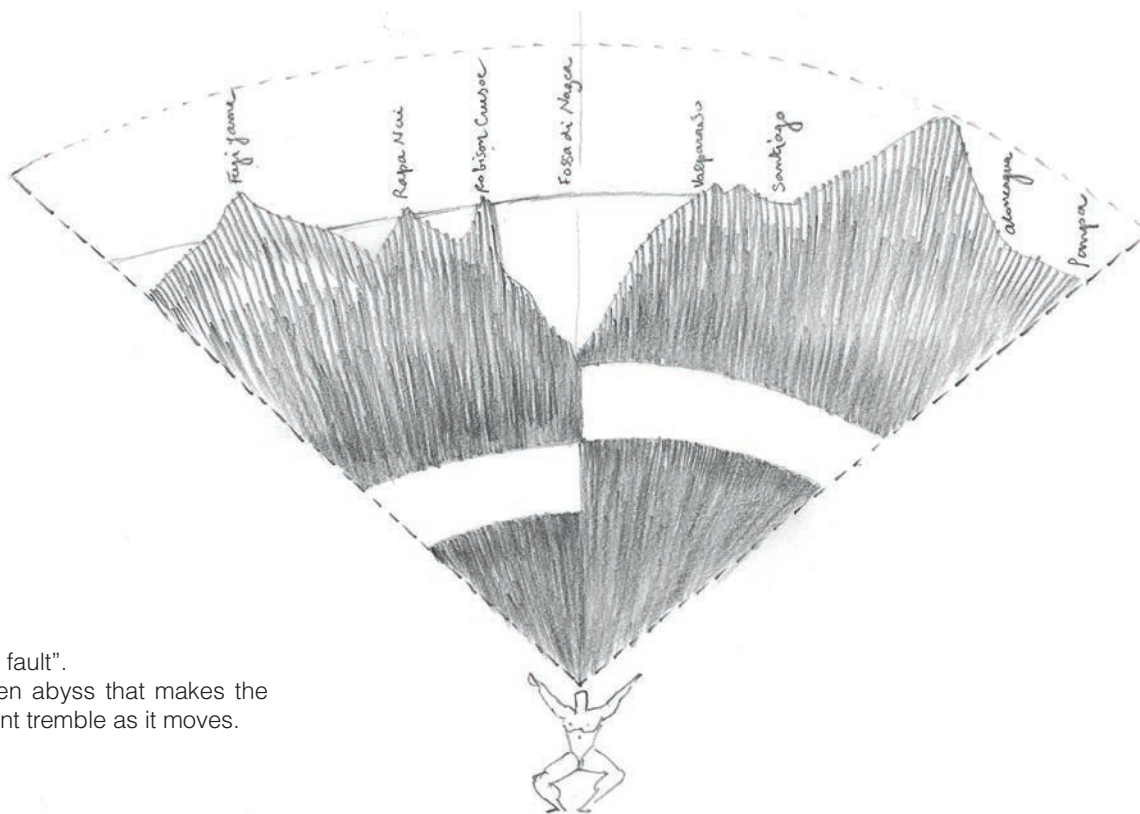
## 1.2 The land we inhabit

We live in the Pacific Ocean basin and, around it, a huge fault, submerged in front of the coast, creates an abyssal pit, surrounded by approximately 4,000 volcanoes, forming the Pacific “Ring of Fire”.



**Fig. 3**  
"Pacific Ring of Fire".  
A large pit around the ocean.

This massive fault defines the edges of the ocean and continental lands with a very deep coastline, reaching 8,000 metres: the Nazca fault, which runs along the entire South American and North American coasts. We live on the edges of these rifts. We live on the edge of an abyss.

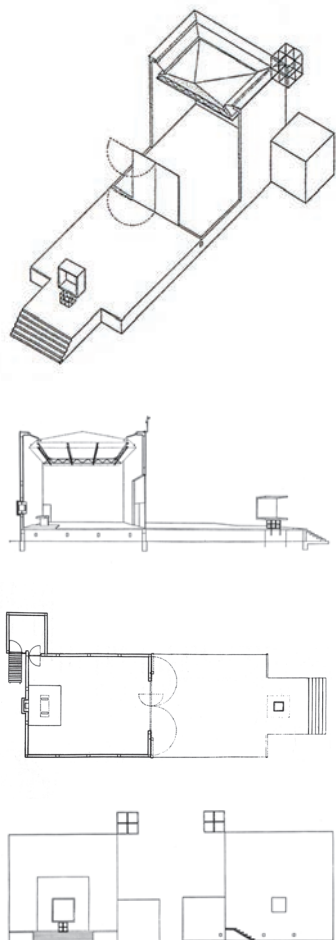


**Fig. 4**  
"Nazca fault".  
A hidden abyss that makes the continent tremble as it moves.

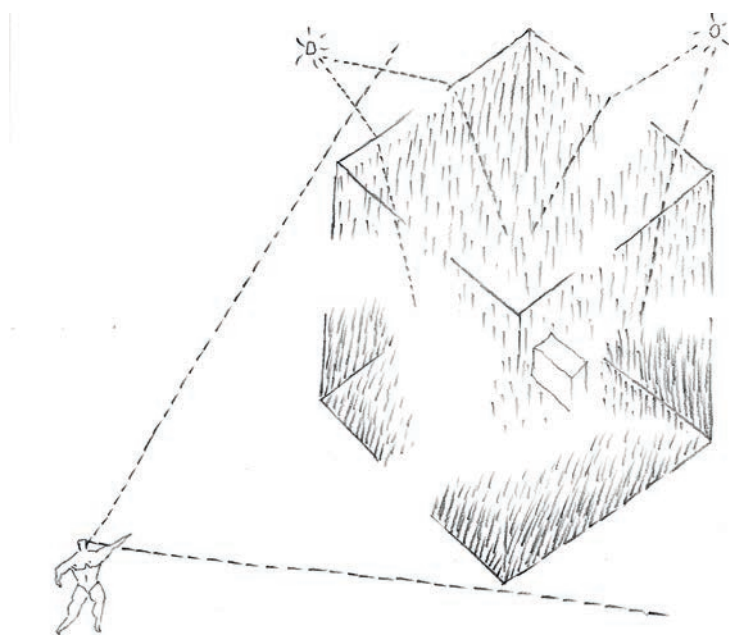
What earthquakes bring: first of all they destabilize human existence, but then they allow "Re", Re-building, Re-birth.

**Fig. 5**

Alberto Cruz, Pajaritos Chapel, 1953. Axonometry, perspective section, plan, elevations. José Vial Historical Archive, PUCV, Valparaíso.

**Fig. 6**

"Pajaritos Chapel".  
Space of soft light for prayer.



### 1.3 Re-flexions on "Re"

The earth shakes, houses, streets, and cities collapse, but afterwards, the possibility of starting again occurs.

A continuous re-construction.

Humankind's ability to re-see, to be re-born.

The Renaissance; a Re-birth of classical Roman times, was not a copy of the architecture and art of that past time, it was a re-seeing, a re-thinking, and a re-building; just as we can think of it today, too.

The *Risorgimento*, a re-arising, a rising again.

The earthquake tests this ability of ours, so typical of the human being.

Humankind renews itself.

Dying to re-arise (the grain which dies and gives life to the plant), a resurrection. [ref.15]

Observing the world and seeing it over and over again, this, I think, is the task of every architect.

The real voyage of discovery does not consist in seeking out new territories, but in having new eyes<sup>11</sup>.

In this way, an architectural work of the past, upon observing it carefully, is re-born and becomes present today.

As an epilogue to the previous paragraph: we do not know what earthquakes are, nor when they will arrive, nor what their strength will be. We only know how we can observe them or interpret them: we live in worlds made up of interpretations. With earthquakes, we understand that we do not possess the biological mechanisms to let us perceive how things happen.

### 2. Space of light

We begin this second part of our essay with the experience of Alberto Cruz in the Pajaritos Chapel project<sup>12</sup>, in Santiago de Chile, which gave rise, in architecture, to the "Valparaíso School".

In this project, although not related to earthquakes, a spatial concept of the light of prayer was born, later re-elaborated in the projects that will be illustrated here. The Pajaritos Chapel project began with an observation on light and space during the act of prayer; thus a soft uniform light was born which, although not constructed, was of fundamental inspiration in the construction of churches after the 1960 earthquake.

## 2.1 A renewed “architectural act”

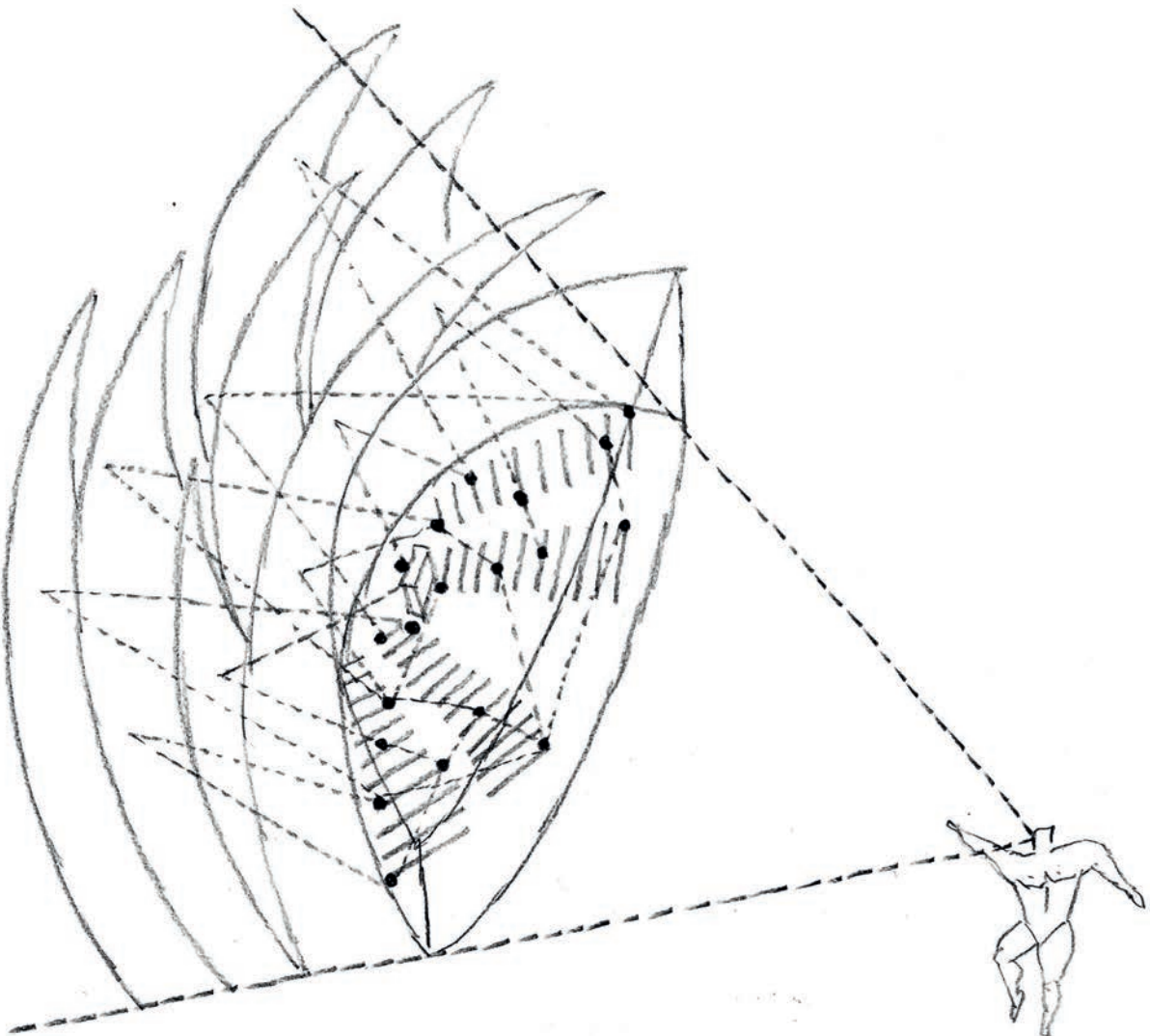
After the Valdivia earthquake in 1960, the Faculty of Architecture of the Catholic University of Valparaíso was tasked with rebuilding the destroyed churches, designing them from scratch free of charge, and seeing in this the possibility of a real architectural work. There was the chance to introduce new liturgical forms which were developing at that time, which moved the act of the faithful towards the altar (and the crisis around participation), with the celebrant seen from behind, to an act in community around the celebrant (for the participation of everyone).

And as a result, after the earthquake, the new churches in the south were born with a new liturgical proposal, which led to a new way of celebrating, in which the congregation redefined itself as a “sign of democracy”.

There was also the possibility of using these spaces for non-liturgical functions such as meetings, assemblies, etc. With this new form, distant gazes intertwined with those of the faithful close by, building “virtual visual trajectories” inside the church.

**Fig. 7**

“Looks between the community”. Looks into a democratic space that surrounds the gathered community.



A unique experience in the relationship between teachers/students, architecture/construction in which, despite the essential nature of the works, the quest was for a great spatial richness through a soft (oblique) light, creating a gentle half-light inside (appropriate for the act of prayer).

A filtered light entering through the windows, referring to the legacy of the *Pajaritos Chapel* project.

## 2.2 The Church of Corral and the Jesuit Church of Puerto Montt

Of the various cases that were developed from design to construction, all in the areas affected by the earthquake, we shall talk below about two of them: the Church of Corral and the Jesuit Church of Puerto Montt.

### *The Church of Corral:*

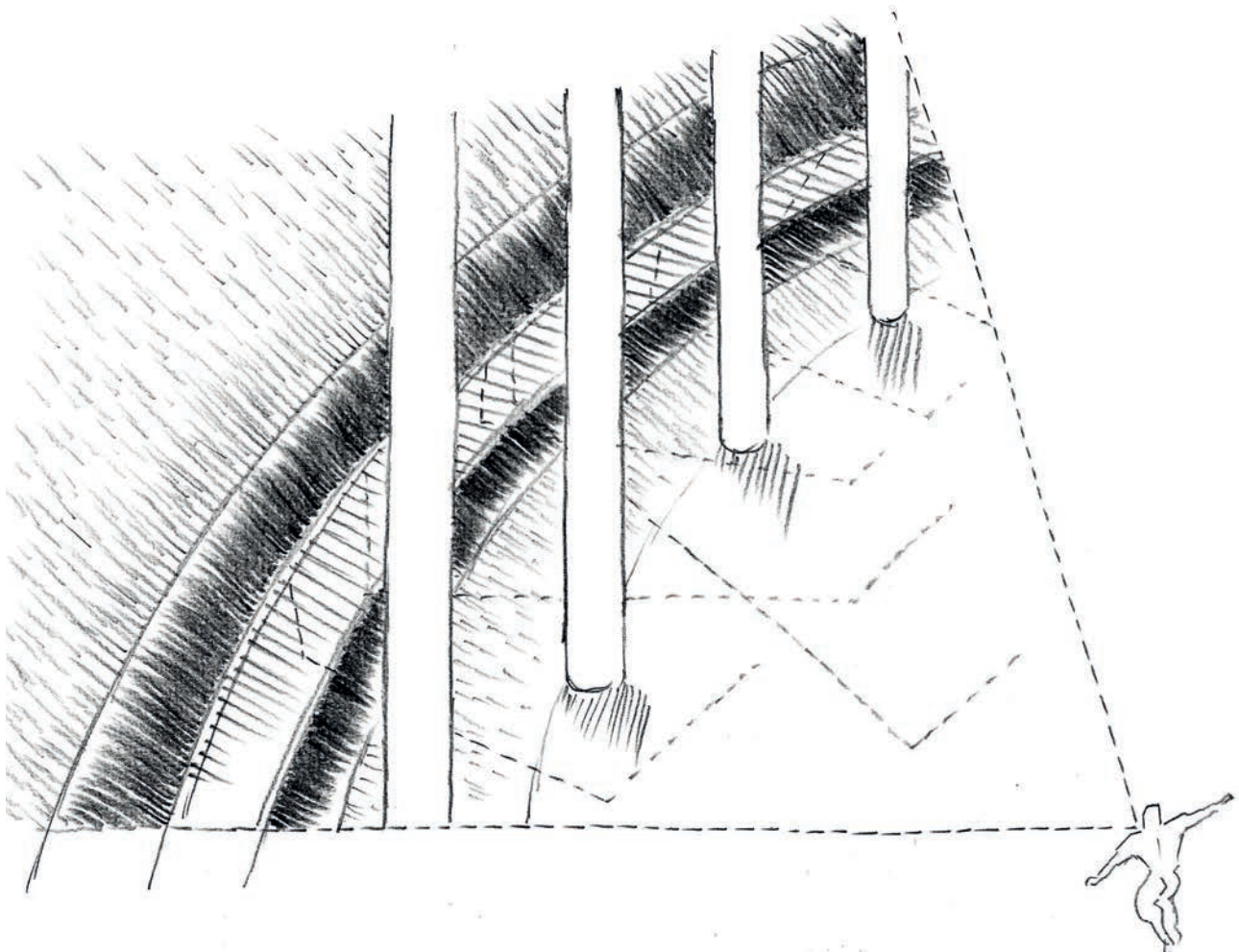
There was already a modest church here, built by local craftsmen, which the 1960 earthquake destroyed. The architectural assignment was therefore accepted; it was a matter of working with what was there, with an architectural form founded “in the act of prayer”. An architectural form that was not “present in its materials”, but in the “light of space” for prayer. Starting from the extant, a metamorphosis was carried out.

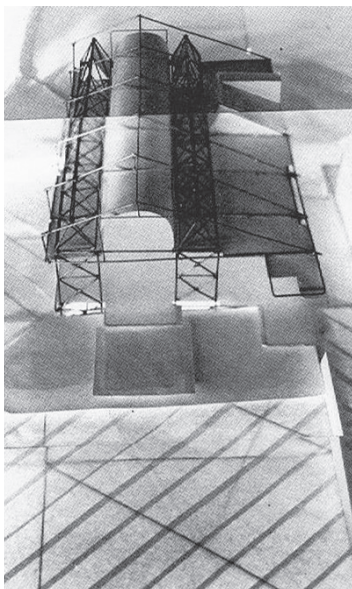
An autonomous skeleton was inserted into the extant structure which brought stability against the wind and the seismic movements of all the elements.

The new structure was introduced inside the old one, without demolishing the roofing so as to be able to work through the winter. Two large, 20-metre-long wooden beams supported the vault and some flat roofs, resting on two vertical supports located at the ends of the church.

The 20-metre wooden beams with reinforced concrete joints required only

**Fig. 8**  
“Light of a gentle twilight”.  
Jesuit church of Puerto Montt.





**Figs. 9 a,b**

Corral church structure model photo.

Photo of the detail of the natural light that illuminates the church of Corral.

José Vial Historical Archive, PUCV, Valparaíso.

simple cutting of the wooden parts. The formwork for the reinforced concrete was very elementary, in order to be able to work with unskilled workers specializing in construction. This system was also used subsequently in the Jesuit Church of Puerto Montt.

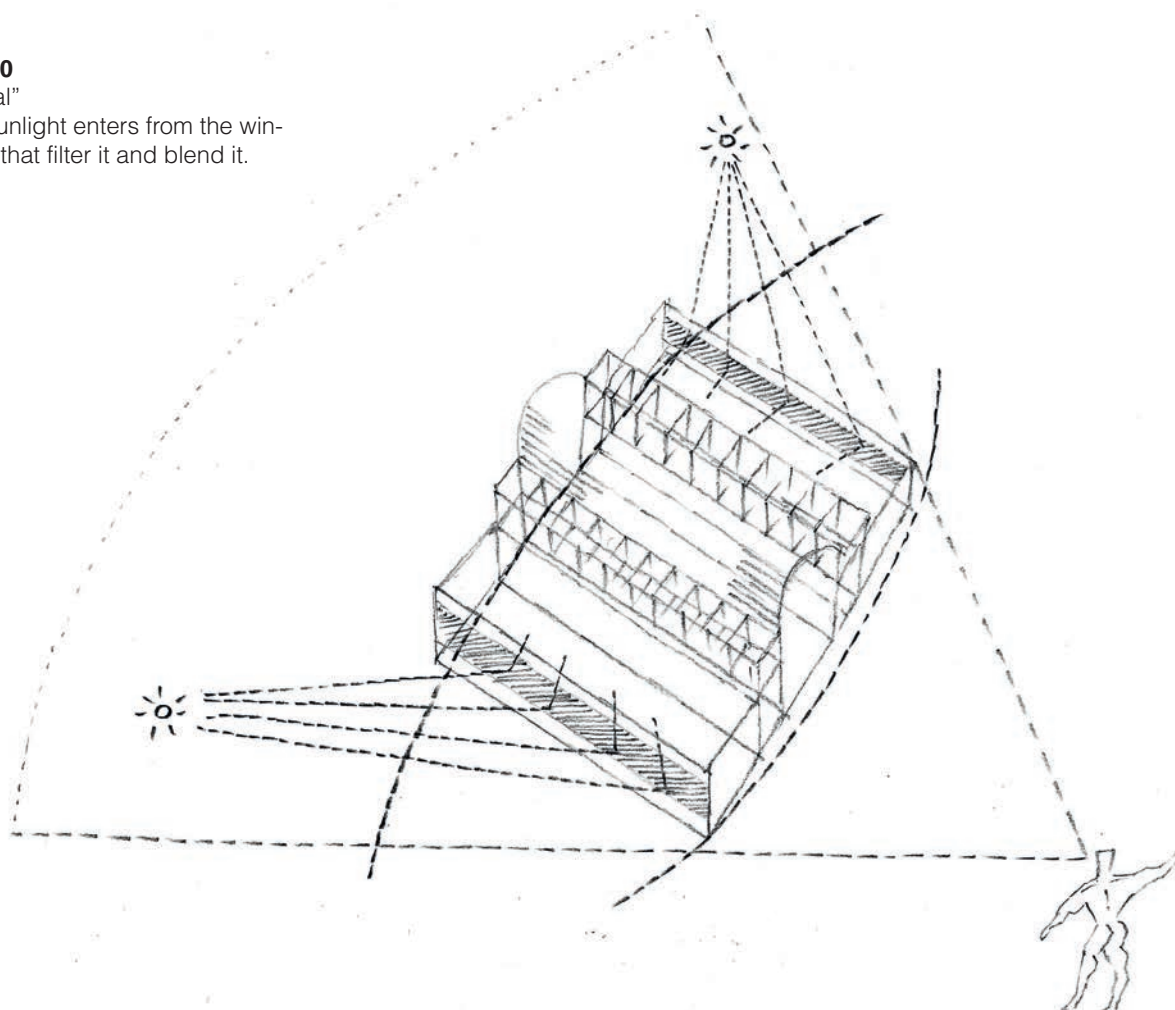
Many destroyed churches were needlessly demolished by order of the authorities and replaced with industrial buildings.

But in Corral, the possibility arose of creating architecture and introducing the new liturgy in a single space (without aisles), with a lighting designed for prayer.

**Fig. 10**

"Corral"

The sunlight enters from the windows that filter it and blend it.



*The Jesuit Church of Puerto Montt*

From the notebooks of Alberto Cruz Covarrubias, architect of the works:

[...] since the 1960 earthquake in southern Chile, we have undertaken to rebuild works that no one else was interested in doing. [...] looking into the history of architecture, we feel that this is not a historical development but a multiple present. [...] we decided to abandon its condition as a copy, in honour of architecture, and through it in this country hit by earthquakes, we made sure that the internal empty space could find its own limits. This was thus a basic discontinuity [...] for this reason in front of the internal void we built limiting surfaces, crafted with the utmost care for the arrangement of the woods and their veins [...], so that between the central void and the limiting surfaces, a virtual intersection was constituted [...], a ring around the void of flat limits built on the diagonal..., receiving the light in an iridescent way [...] we live in a continent that has no Parthenon, nor a procession of original works, and for this reason the poem indicated to us that the original work would be the poetic word<sup>13</sup>. (Cruz Covarrubias 1961)

Therefore, we believe that in this America, the foundation of architectural creation is to be found in the word, the poetic word.

The poetic word of *Amereida* and also of some other poets<sup>14</sup> is a manifestation which opens up to architectural thought.

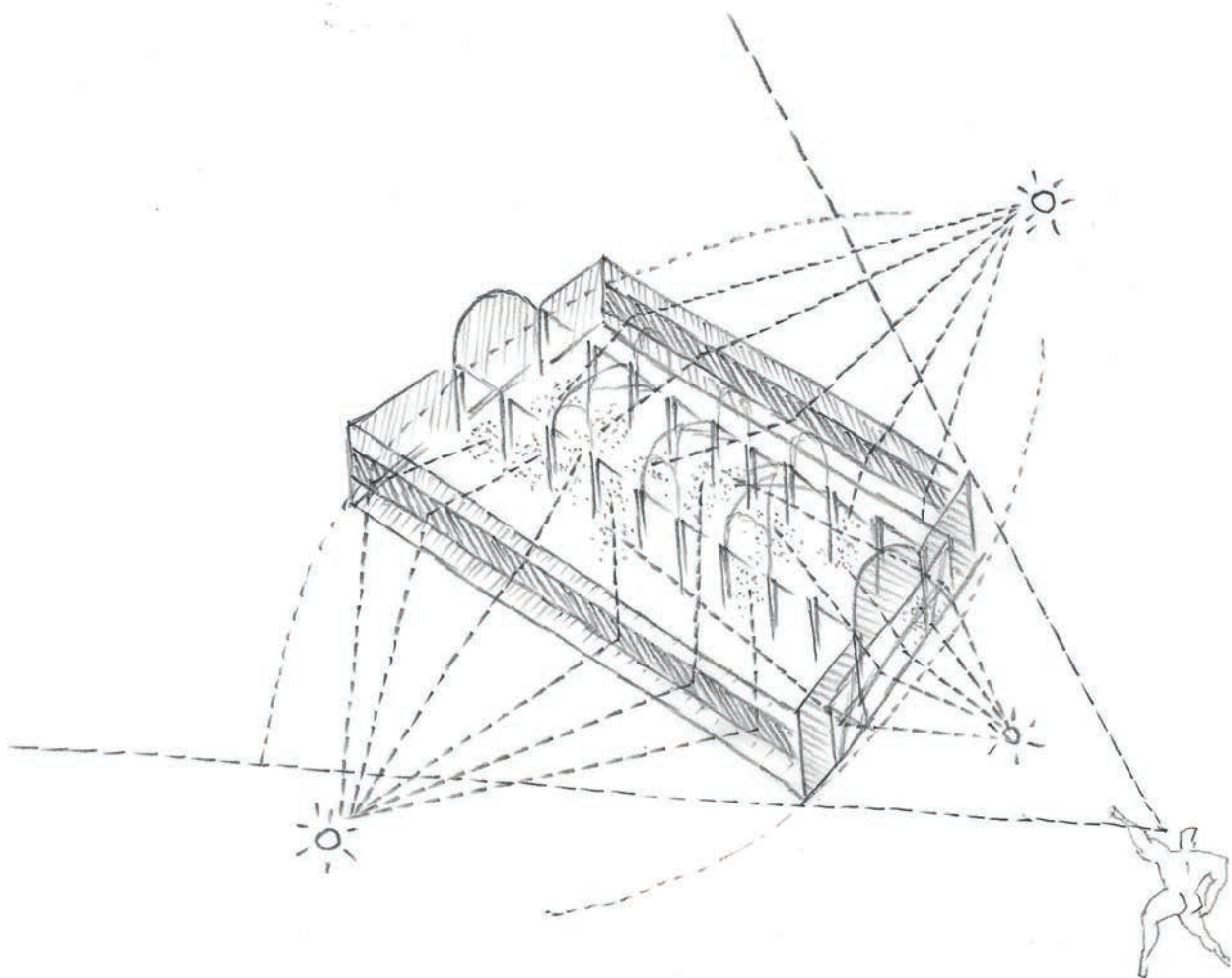
From the notebooks of José Vial Armstrong, architect of the works, we can learn of the difficulties in which the architects found themselves with the client priests, many of them struggling to understand contemporary architecture<sup>15</sup>.

From his notes:

**Fig. 11**

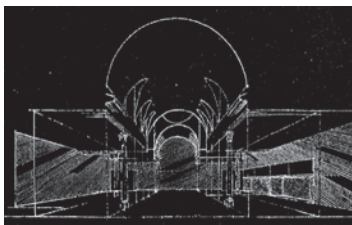
“Puerto Montt”.

The construction of a light to come together without changing the existing form.



**Fig. 12**

Photo of the presbytery of the church of Puerto Montt.  
José Vial Historical Archive, PUCV, Valparaíso.

**Fig. 13**

Perspective sketch by Alberto Cruz of the church of Puerto Montt.  
José Vial Historical Archive, PUCV, Valparaíso.

[...] The new is formed as a flat surface, shown by the diagonal, thus is a discontinuity established in relation to the old. The discontinuity within a closed, single space, in a cross plan, brings the complexity that opens up the multiple way of being in a church. The flat surfaces build another bright horizon – not naturalistic – with a bouncing light in which the ancient is submerged – just as it is, contained within another distance. This whole reconstruction is full-blown architecture, linking the new with the old. Not a church of present forms, but one of the form of absence [...] (Vial Armstrong 1962)

A new liturgy which tackled the crisis of the participation of the faithful proposed the proximity of the congregation to the altar, avoiding a unique homogeneous relationship with it, giving the possibility for non-liturgical events such as meetings, assemblies, and more. Let us listen to the poem:

*Porque el don para mostrarse equivoca la esperanza (p.3)*  
*[Because the gift to show oneself equivocates hope] [ref.8]*

*La tierra emerge cuando nos encuentra sentido (p.12)*  
*[The earth emerges when it makes sense to us] [ref.9]*

*Tiene signo nuestro origen? (p.12)*  
*[Is there a sign of our origin?] [ref.10]*

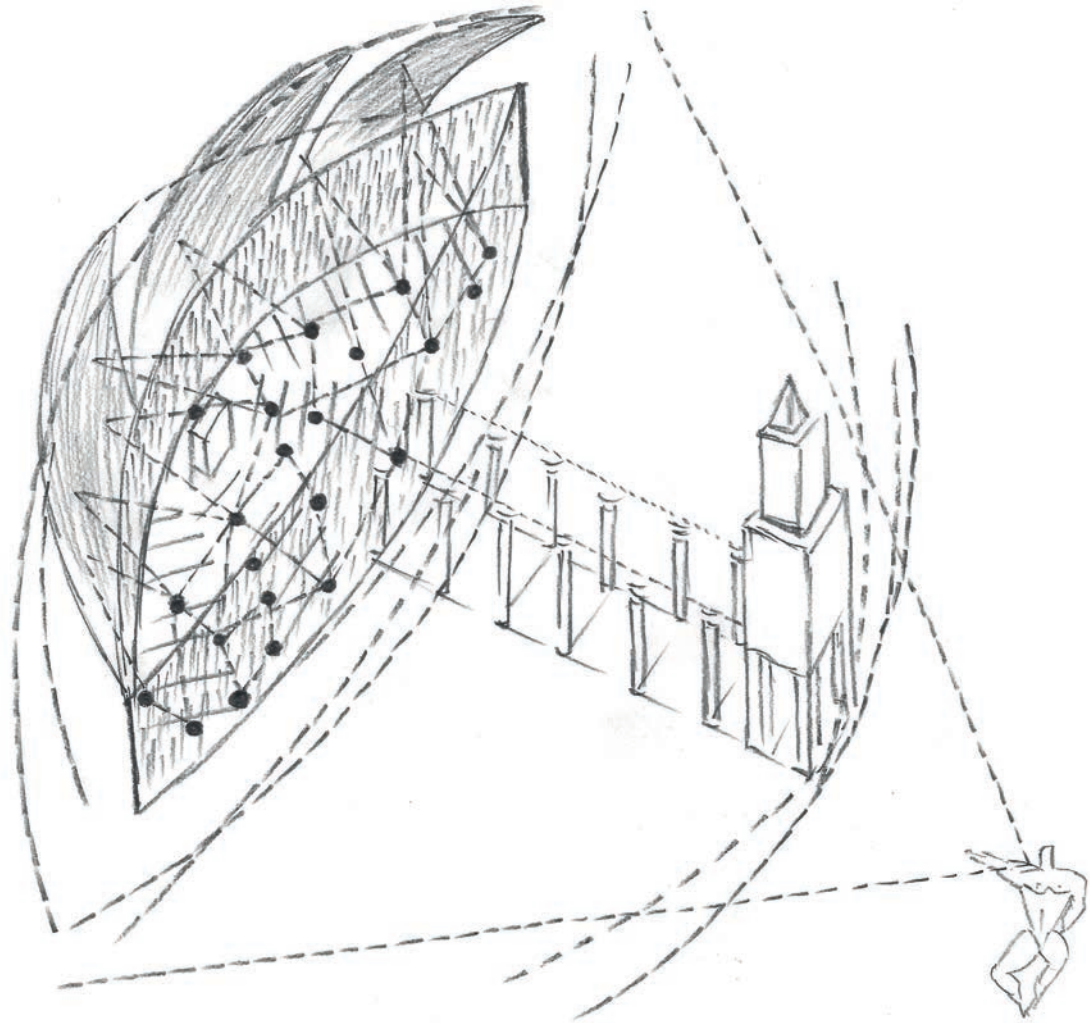
*Pero un regalo es presente (p.14)*  
*[But a gift is a present] [ref.11]*

*Sino y signo que demandan (p.14)*  
*[A fate and sign that demand] [ref.12]*

*Podemos interrogar poéticamente el propio desenvolvimiento del signo (p.15)*  
*[We can poetically question our own development of the sign] [ref.13]*

*Tratamos de hallar la inscripción (p.79)*  
*[Let us try to find the inscription...] [ref. 14]*

*volver, hay un llegar que es volver, así como el alba es un perpetuo volver, vivimos orientados por la palabra volver un continuo volver” (p.184)*  
*[returning, there is an arrival that is to return, just as dawn is a continuous return, returning we live guided by the word, a continuous return] [ref.15]*



**Fig. 14**  
 “Church of Arauco”.  
 What remained, construction of  
 an entrance.

with the churches of the south, the “Sign” was sought, leaving an “inscription” of the new liturgy (in the plan, in the form of the congregation).

### 3. Valparaíso, towards the dreamed city

#### 3.1 Re-tracing it

On the night of August 16, 1906, an earthquake measuring 8.2 (Richter scale) almost completely destroyed Valparaíso, a port, financial centre and important city of Chile.

After the earthquake, the citizens wanted to re-draw<sup>16</sup> a large part of the city, the *Almendral* district<sup>17</sup> which was devastated more than by the earthquake, by the fires which broke out due to the rupturing of gas and water mains.

In this way, the citizens expressed a continuation in inhabiting a place, by re-arranging it. The desire was to renovate the city, under a new scheme which would regularize its streets so that – so the citizens claimed – it would become a “real city” like Santiago, with a regular layout. A new residential area was created, on a flat hill known as *Playa Ancha*, as well as a brand new residential neighbourhood to the north, *Viña del Mar*, which was born as a “garden city”, a place where the more affluent social groups fleeing from the contagions of epidemics would live, since the earthquake had resulted in poor hygiene.

But in 1914, the Panama Canal opened, the ships no longer made the rounds to the south of the continent, from Cape Horn or the Strait of Ma-

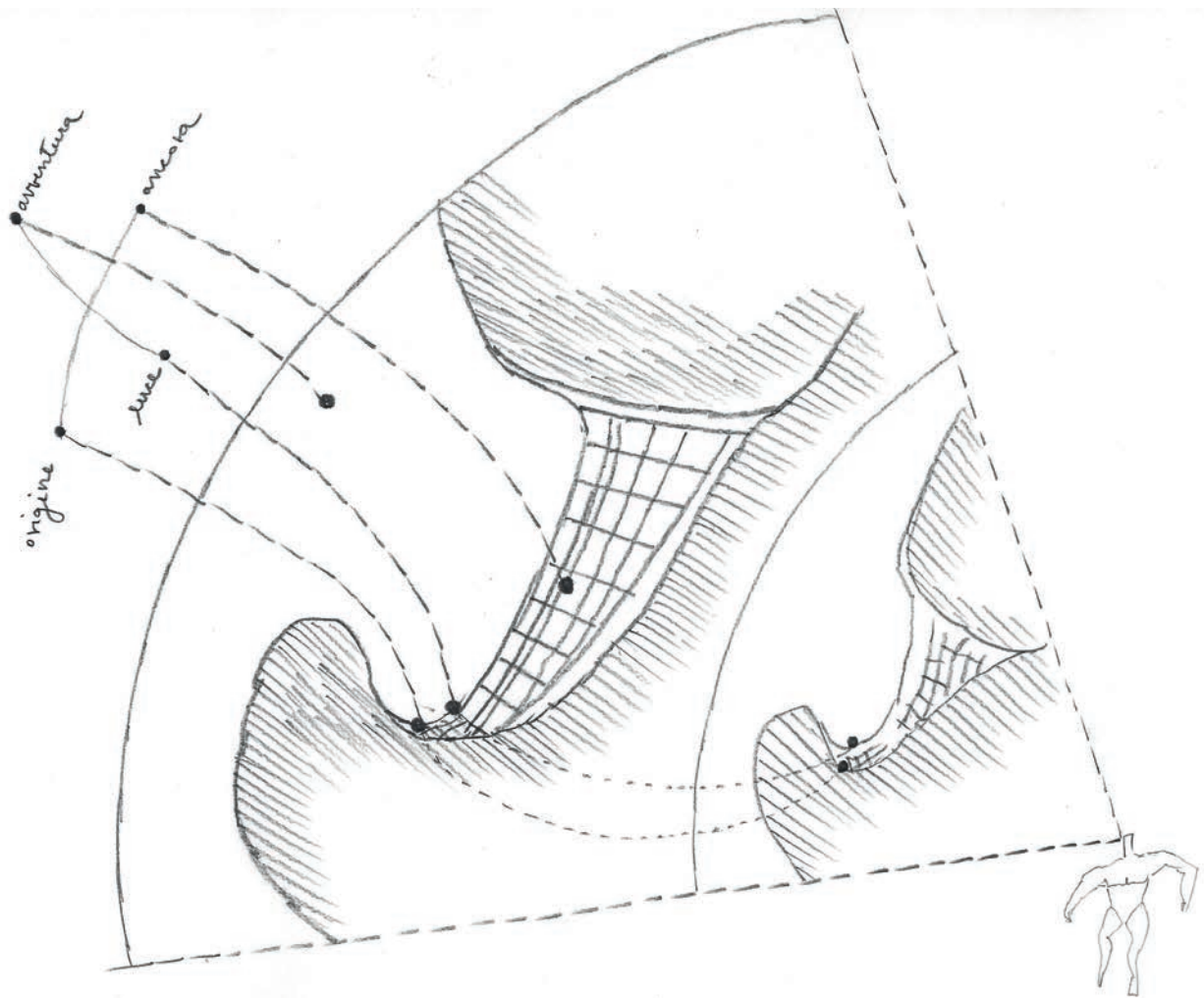
gellan, so they no longer stopped at this port. The projects ground to a halt, and the citizens' dream collapsed. [ref.8]

### 3.2 Dreaming of the perfection of a city

Towards the realization of a dream. The inhabitants and the local and state authorities dreamed of wide streets, regular blocks, straight lines, gardens, and promenades.

In the reconstruction plans not only was the need for a new city shared, but also the projection of the expectations and ideas of the desired city. The city as a "democratic" urban "Sign".

The destruction of Valparaíso in 1906 brought with it a stormy discussion on the new plan of the city, placing different visions of its value as imagery



**Fig. 15**  
"Valparaíso trajectories".  
Looking at the city today, from its  
origins.

and commonplaces on the worktable.

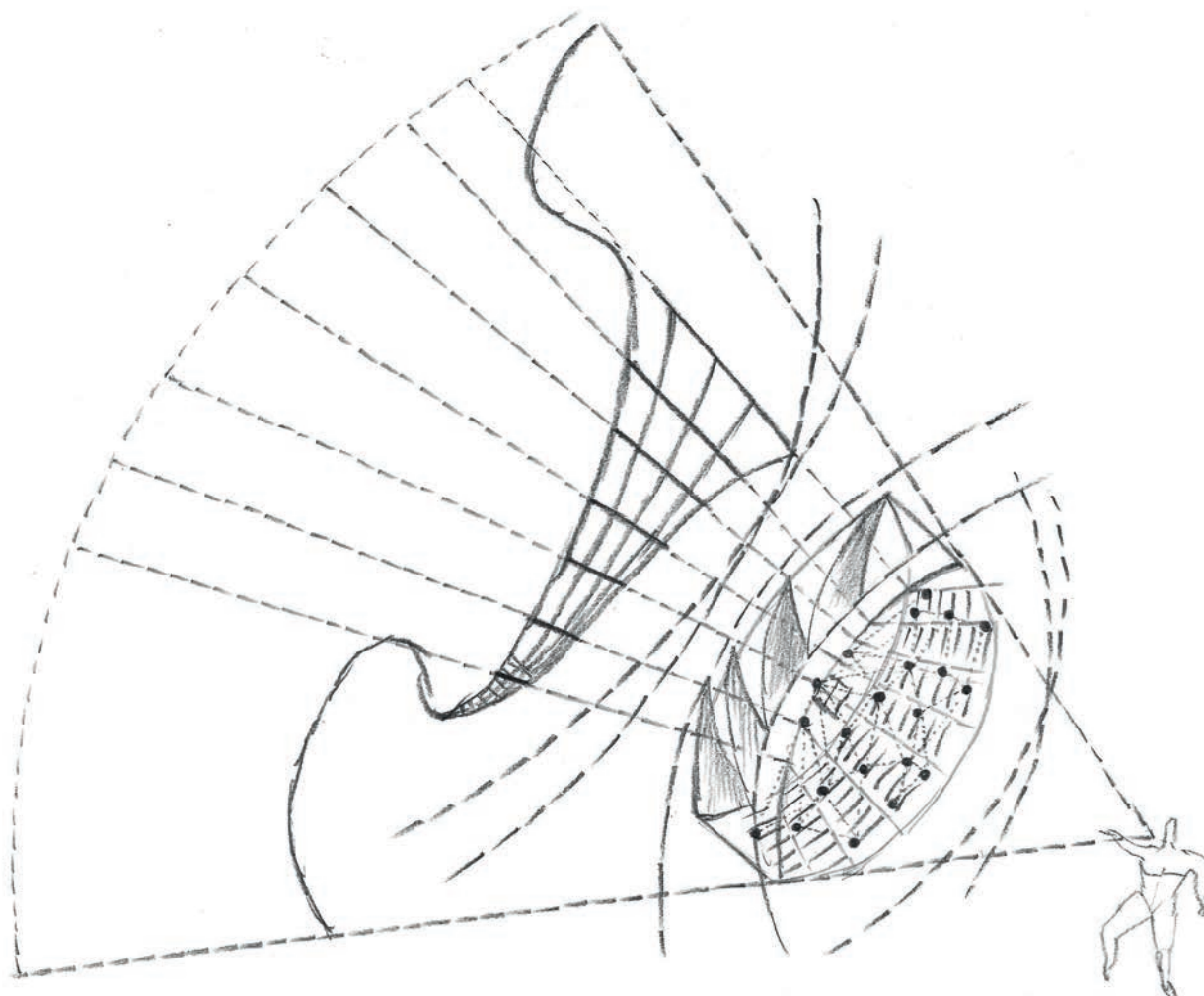
The desire was for avenues 46m wide and side streets of 20m, a new idea of urban public spaces, squares, parks, living with proximity on foot, and the eye in depth, a harmony between foot and eye [ref .9].

The reconstruction projects were concerned not only with rectification, enlargement, and the creation of new roads and avenues, but also with burying the watercourses that run down from the hills. New roads were created which crossed the whole new rectified district, the *Almendral*.

Taking up the observation developed previously, of "the light" and of the single space, an "inscription of a democratic sign", we can say that here too, light became a priority: brightly-lit streets, the sun accompanying the

doings of the citizens, through the new dimensions of the space that would host the public life of a city for everyone.

«The city as a product of a society and a space that defines and conditions it<sup>18</sup>». The regeneration was also a process carried through by the desire to return to the social and cultural life which the disaster had threatened, the *genius loci* – the sense of place – close-up gazes between people and distant gazes towards the landscape (both the hills and the sea) within a spatial unit.



**Fig. 16**

“Valparaíso plant”.

Looking at the city in relation to the new way of democratic assembly of the liturgy.

There was consensus on which general values should inspire an ideal Valparaíso, specifying the search for a more modern, more hygienic, more civilized city, with a democratic inscription (the layout – like the new liturgy).

Thus the catastrophe was transformed into an opportunity to redesign the urban space, generating itself as a large “window”, through which the urban values of a society were observed more clearly. The city had the power to do so. There was no money, the port was no longer the same, but new institutions were born after the earthquake, such as the Seismological Service of Chile which had not existed hitherto.

Today, for the inhabitants of Valparaíso, in winter, the water that flows down from the hills floods their homes. They repair them and come back to live there in a continuous re-turning.

Today, as always, the inhabitants see their house collapse due to earthquakes, but it is rebuilt; many houses, built using the balloon frame sys-

tem, crack but do not fall down, the plaster breaks, but after each shock it is repaired. A continuous repairing, after the continuous destructive trembling of the earth. [ref.15]

This is a continuous ability to regenerate.

Today Valparaíso is a UNESCO World Heritage Site; it preserves and takes care of some of its spaces which can be appreciated by acute gazes, between the hills and the old buildings<sup>19</sup>.

An old man who does not want to die but defends himself with difficulty. Other cities are severely affected by earthquakes, such as San Francisco in California (the same fault but with a different name), and Lisbon in Portugal. These cities have been able to recover by bringing to the world knowledge that did not exist before the earthquakes, thus initiating a major scientific<sup>20</sup> and even philosophical change<sup>21</sup>.

Therefore we need to be aware of our vulnerability, living next to a huge invisible fault, which shakes us from below.

#### 4. Thinking about a new city

How to live in this trembling land and the myth of the Phoenix, of continuous re-building. With the initial observation of the forging light of an architectural void, unique as a “democratic inscription”, we can think of a swathe of Chile’s central territory on the 33<sup>rd</sup> parallel south utopically.

##### 4.1 City-region proposal

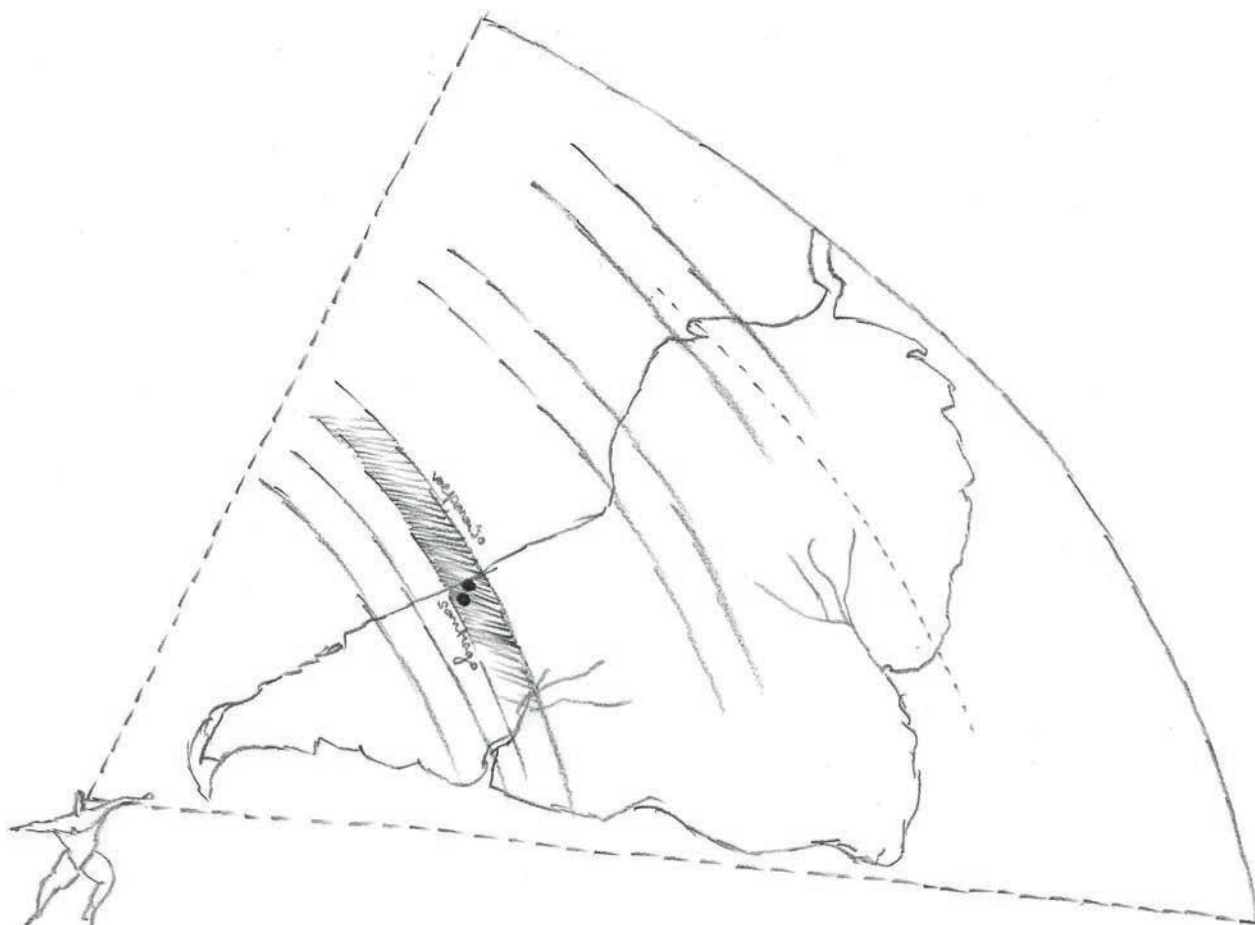
We can think of a city-region territory in the central area of Chile.

Santiago de Chile, today a metropolis, is on the way to becoming a megalopolis. But given that megalopoleis always have a negative connotation

**Fig. 17**

“City-region”.

A city-region proposal in the South American continent in Chile and in other possible locations.



(huge, congested, contaminated, unliveable cities), we can utopically think of the union between Santiago de Chile (inland) and Valparaíso (on the sea) as a “happily habitable” megalopolis, or to put it in better words: “A happily habitable city-region”.

#### 4.2 To be able to think of this territory, poetry can accompany us.

Let us listen to the poetic word of Amereida:

*Como recibir América desvelada? (p.25)*  
[How to accept this unveiled America?] [ref.16]

*Desvelar rasgar el velo (p.25)*  
[Unveiling to tear the veil?] [ref.17]

*Consentir que el mar<sup>22</sup>...nos atraviese (p.25)*  
[Allowing the “Inland Sea” to cross us] [ref.18]

*Travesía... la amenaza de lo oculto se dé a luz de canto... (p.26)*  
[Travesía... let the threat of what is hidden present itself as the light of a profile...] [ref.19]

#### 4.3 How to operate?

*Estamos en una tierra en que el obrar es leve (p.95)*  
[We are in a land where doing is light] [ref.20]

*Travesía para palpar el presente de lo leve (p.96)*  
[we must cross this land to feel the present of this lightness] [ref.21]

*... con dicho lenguaje hemos de mirar nuestro oficio de habitar (p.120)*  
[... so with this language we have to look at our occupation of inhabiting] [ref.22]

*¿Cómo en vez de asolar y allanar para olvidar el abismo como podríamos consolarlo? (p.160)*  
[Instead of ravaging and levelling to forget the abyss, how can we comfort it?] [ref.23]

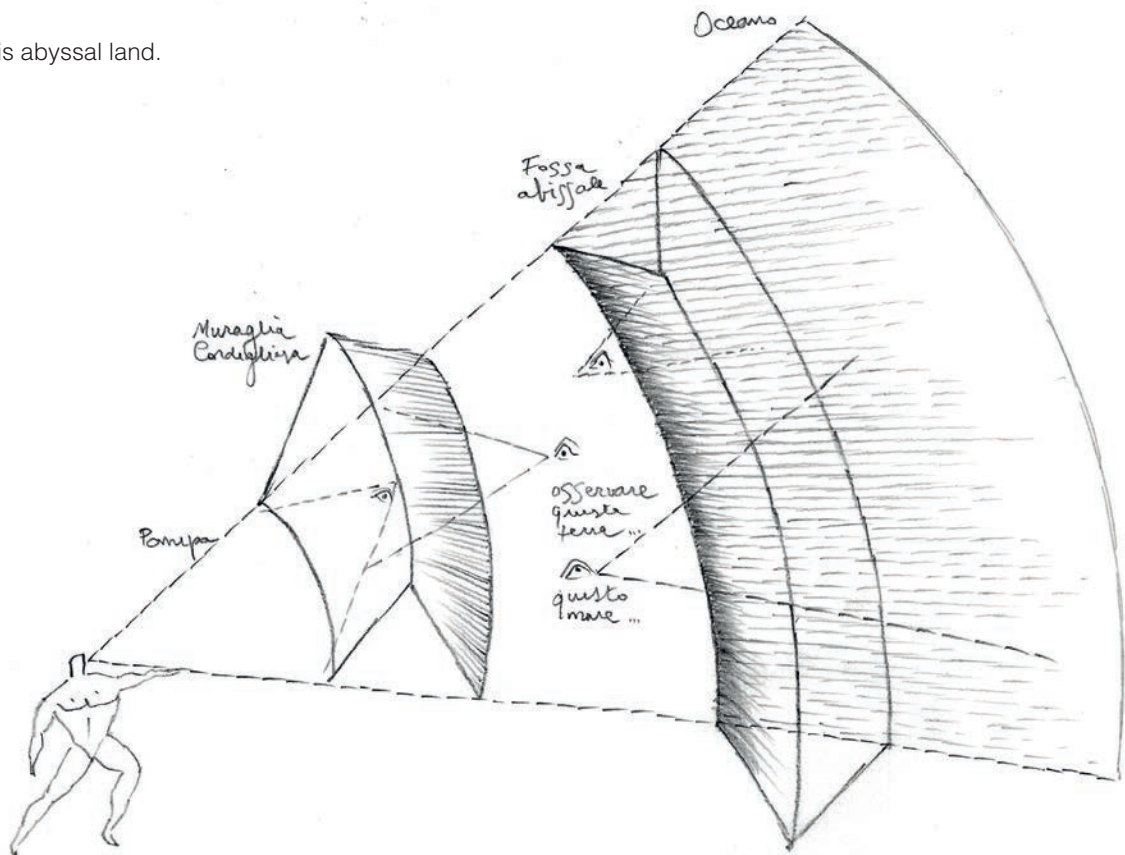
*Solo se consuela la tierra, solo se logra suelo cuidando del abismo... (p.160)*  
[Only the Earth is comforted, only land is won by caring for the abyss...] [ref.24]

*Así irrumpió América y entró en trance, este es su origen estar en trance, trance presente presente lo que tiene un destino, destino es una fidelidad al origen (p.163)*  
[Thus America broke in and went into a trance, this is its origin, being in a trance, a present trance – present is what has a destiny, destiny is a faithfulness to origin] [ref.25]

#### 4.4 This America of ours is abyssal

To be able to observe and think about this territory, how to remove the veil, tear it, to allow the “Inland Sea” to cross us, we must travel across it with a sharp, poetically thinking gaze, so that the threat of what is hidden presents itself as the light of a profile, [ref.19] which is not direct but reflected. How to make architectural works that reflect light (Heidegger stated that light exists when the temple reflects it through its columns). Works designed for this, but do all constructions do so? No! In *Eupalinos ou l’Architecte*,<sup>23</sup> through the architect, Paul Valéry says that most works of architecture are silent, others speak, some instead sing; therefore, we must make works which sing to humankind’s living in the world, through the sunlight that reflects them, transforming them into a significant “sign”.

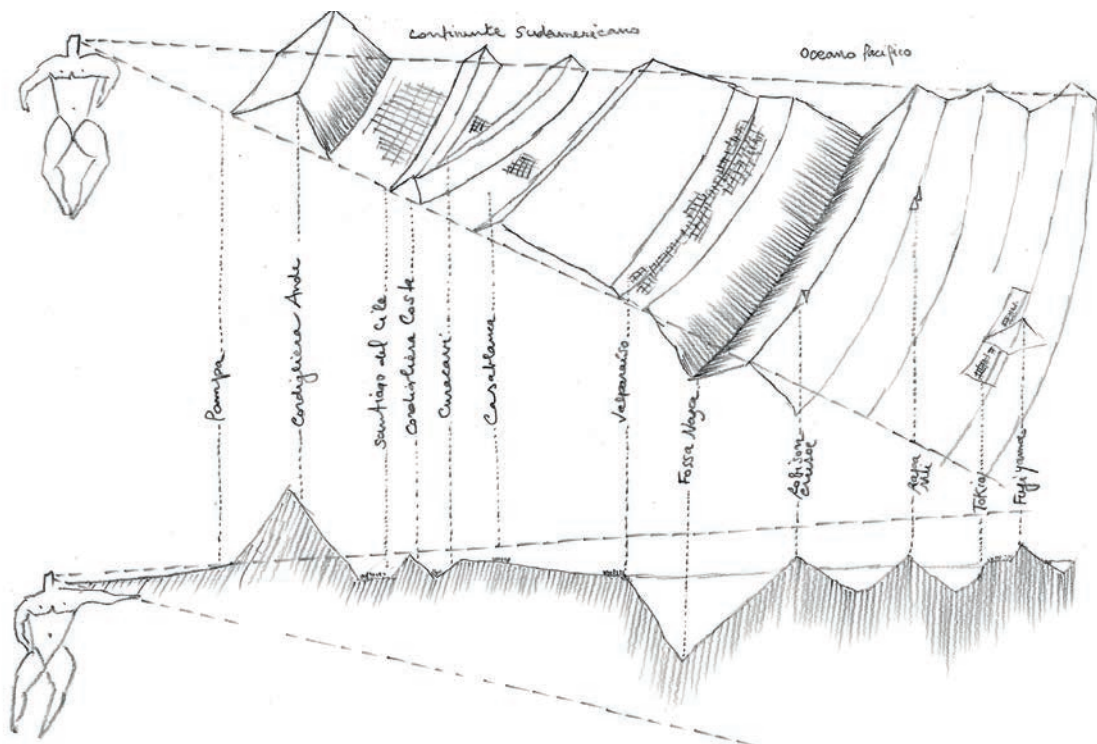
**Fig. 18**  
Observe this abyssal land.



**4.5 Santiago grows towards Valparaíso, a proposal for an “architectural region in a happily habitable territory”**

Creating a new city-region in a territory in which we know the hidden faults which are going to open up at a certain moment, the known existing volcanoes and the possible ones that will appear, and the devastating effects of climate change. A studied land (the poetic dwelling which Heidegger proposed is a thinking dwelling), crossed in order to live it by observing it, and thus be able to anticipate the faults that will appear with earthquakes, to coexist with them and with nature.

**Fig. 19**  
From the wall of the Andes mountain range to the hidden abyss of the Nazca fault in the ocean.



#### 4.6 The poetic word

In order to think of this utopian project, the epic poetry of *Amereida* once again accompanies us:

*Que también para nosotros el destino despierte mansamente (p.4)*  
*[May our destiny wake us up gently too] [ref.26]*

*Y este lenguaje de lo múltiple debe hablar en América (p.124)*  
*[And this language of multiplicity must speak in America] [ref.27]*

*dar cabida a la tierra en su múltiple urgencia (p.163)*  
*[give capacity to the earth in its multiple urgency] [ref.28]*

*América vista a partir de la tierra (p.174)*  
*[America seen from the ground] [ref.29]*

#### 4.7 Santiago de Chile-Valparaíso, towards a “happily habitable region”<sup>24</sup>

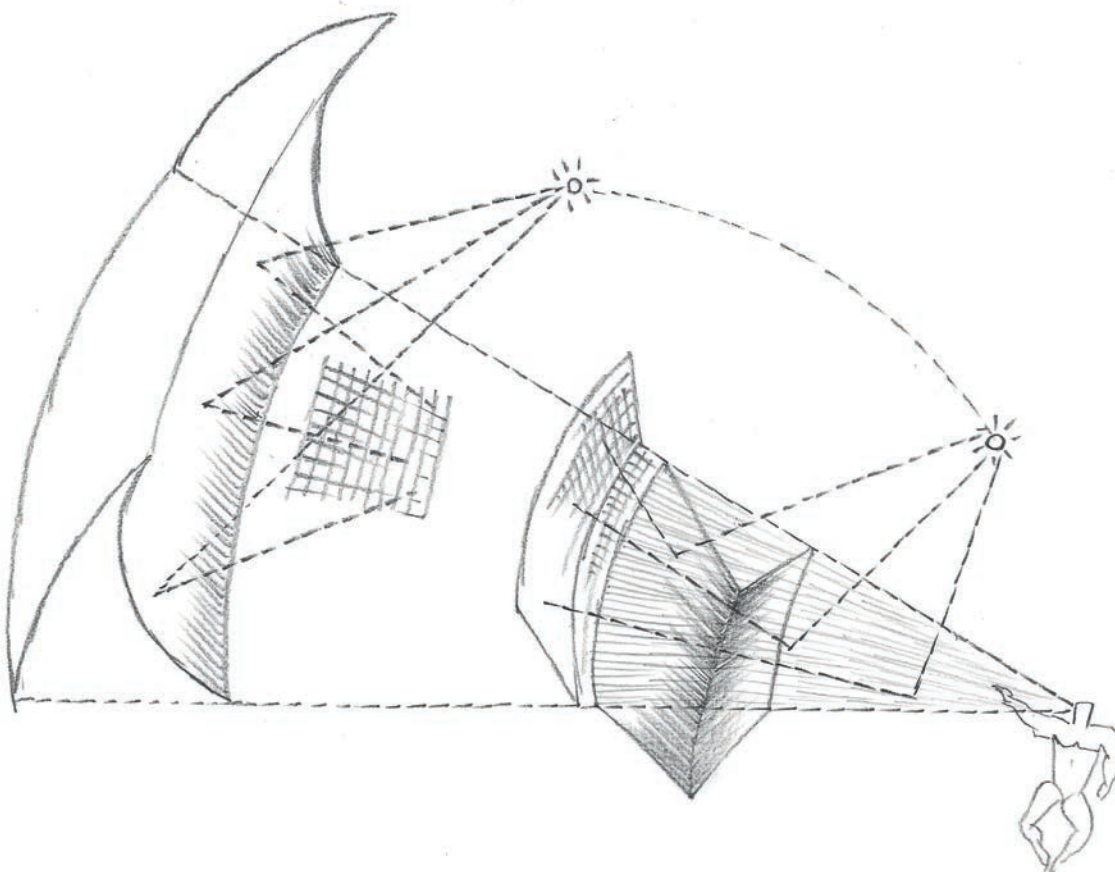
Santiago de Chile, a metropolis which is about to transform itself into a megalopolis, not far from the Pacific Ocean basin where the port of Valparaíso is located, in front of the deep Nazca fault.

Valparaíso as a huge Greek theatre facing the huge Pacific Ocean, certainly not peaceful, but with great waves of water that try to devastate it in the winter. Santiago at the foot of a huge Andes mountain range; snowfall in winter, like a great Japanese wave from Hokusai, in summer like a large greyish rock; but throughout the present year (even if not always seen due to air pollution) a “place” of the city<sup>25</sup>. Thus, the *Cordillera* – the Chilean Coastal Range – and the Pacific, two large screens mirroring and reflecting the sunlight, transmitting it to the cities.

**Fig. 20**

“Great geography”.

From the capital under the light of the Andes to the dark depths of the Nazca fault.



#### 4.8 There are faults, volcanoes, earthquakes

The *Cordillera* contains dangerous faults in its slopes towards the city, some today dangerously inhabited due to a lack of awareness.

An earthquake is born hidden and manifests itself on the surface<sup>26</sup>.

The city of Santiago, which is constantly growing, will join the coast, is stretching towards it. It can already be thought of as a city-region with a territory capable of being able to live together with earthquakes.

Here we wish to think of a utopian project.

Imagining a territory organized as a city-region, towards a goal, a new way of living in an unusual megalopolis, but one that leads to “happy living”. It is therefore necessary to know the collective dreams in a society that aims to have a “democratic inscription”, in order to be able to build, with the participation of and together with the specialists who take care of cities, architects, urban planners, geographers (very important for this design idea), engineers, scientists, politicians, as well as philosophers, and poets, who see what non-poets cannot see, and geologists (also very important in this vision), since they can see scientifically what happens below ground, which is invisible.

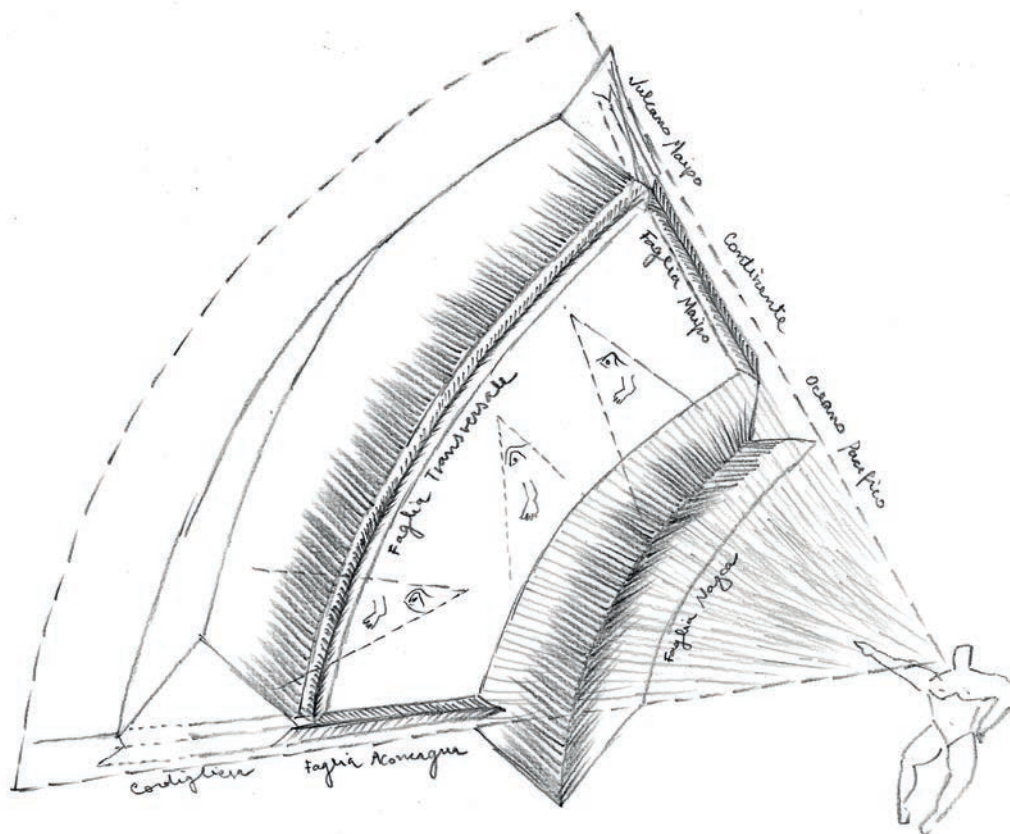
And so with this paragraph we wish to make a proposal for a territory, a special city-region in the centre of the country. [ref.23] [ref.24]

Imagining that this utopian proposal, in a central swathe of the country, from the *Cordillera* to the Pacific, can be thought of as a habitable territory which is moving towards a “happily habitable city-region...”, therefore a “beauty belt” of the living of the eye and the foot, with acute oblique glances from near to far, in harmony with one another [ref.5], freeing Santiago from an excess of governmental power and also freeing it from a unique metropolitan conception.

It is therefore necessary to expand it towards the sea, not in a natural way, but architecturally, conceived through urban planning and scientifically. [ref.22]

**Fig. 21**

“City-Region”.  
City-Region that coexists with earthquakes.



#### 4.9 The architecture

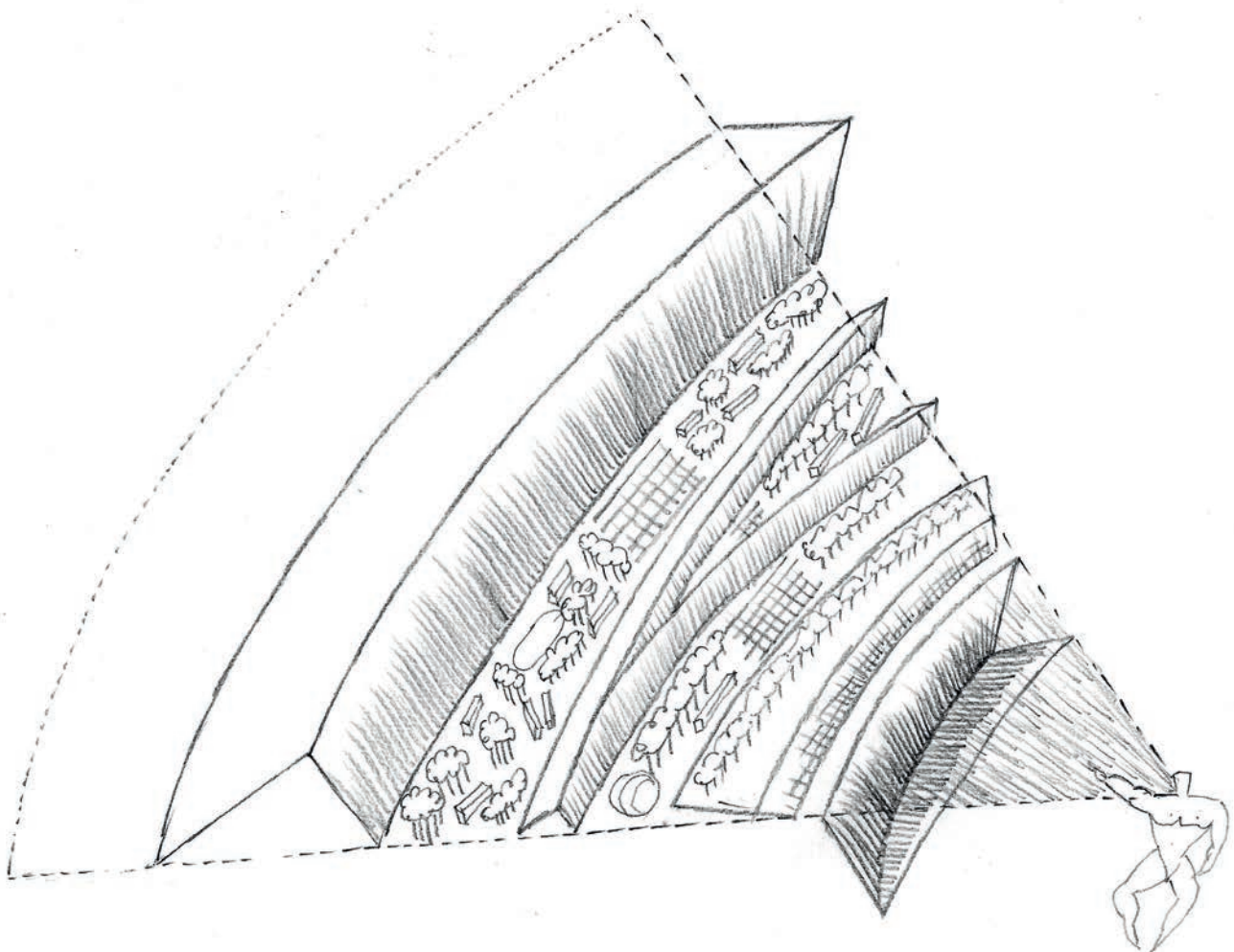
Living in buildings of an experimental architecture, made using cheap materials, [ref.20] immersed in the green of the parks, taking care of the relationship with nature by protecting it as a heritage. Constructions in wood or adobe (unfired earth bricks) [ref.21], without access stairways, a symbol of power, but all on an easily accessible floor, a manifestation of a unique and democratic space; buildings which represent the architecture of a developing country with its multiplicity of ethnic groups [ref.27]. Some constructions in the midst of woods, others in the midst of semi-desert places, places which can have that same variety of nature that the country itself possesses. And with the pre-existent, a harmonious reunion of the old and the new.

New distances to inhabit, distances that take shape from a new way of life (post-pandemic), preparing for new pandemics, future earthquakes, and possible volcanic eruptions.

**Fig. 22**

“Architecture”.

A new architecture for a happily inhabited area.



#### 4.10 The society

Socially mixed neighbourhoods for an awareness of the diversity of economic entries (as I think it was in the ancient Italian Old Towns where the palaces of the nobility shared the neighbourhood with houses and artisan shops), and of the diversity of thinking [ref.27] and a new education which eliminates huge social inequalities<sup>27</sup>.

#### 4.11 The great geography

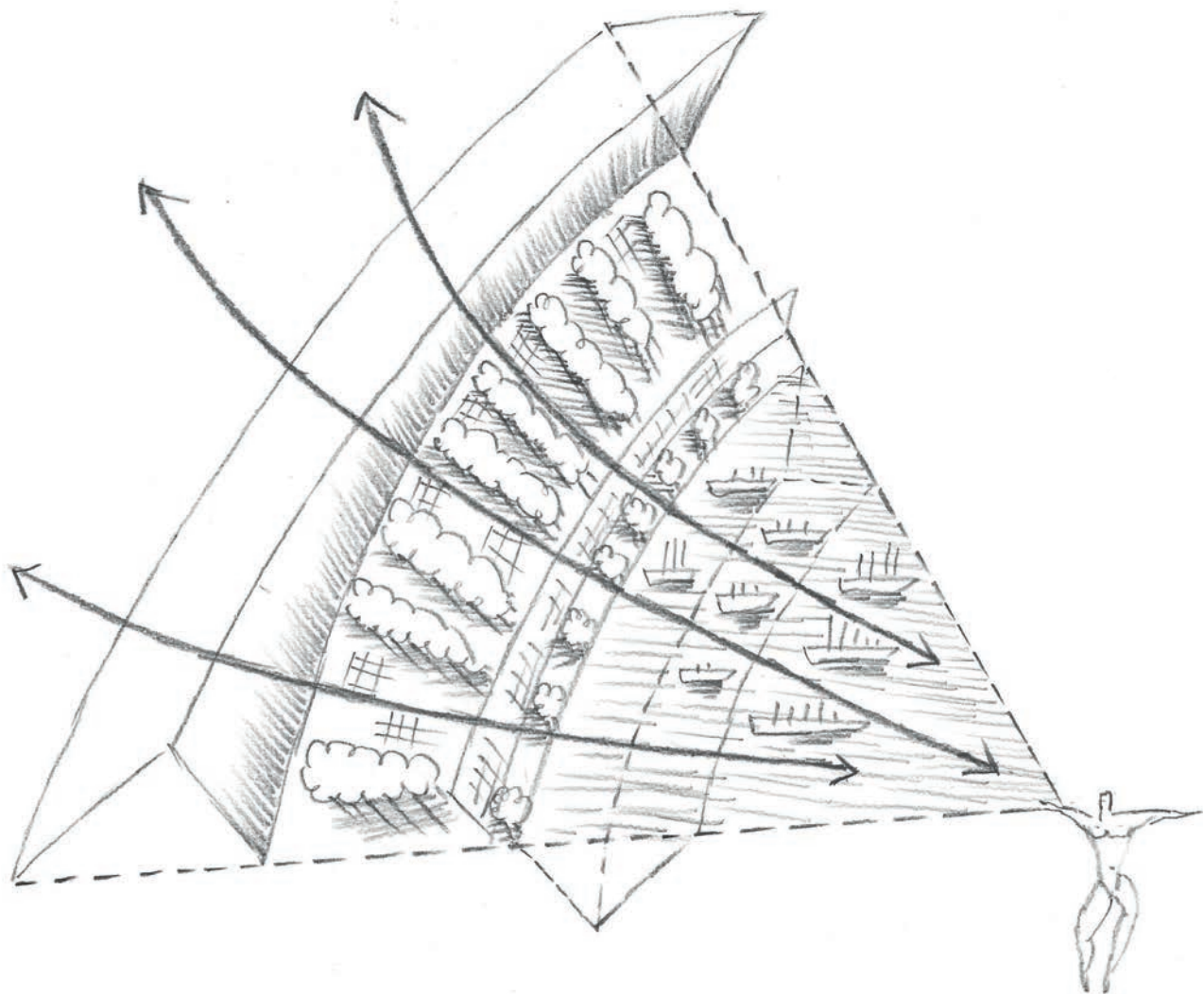
- The *Cordillera*: reaching this huge wave above the city with its ski centres, from the city itself. Being able to climb the Andes mountain range, not only to ski, but to enter it, to enter the first part of this South American “Inland Sea” [ref.18], transformed into a huge rocky park to be taken care of. Tunnels for connections beyond the Andes to join the Atlantic Ocean to the Pacific Ocean.

- The Pacific Ocean, which invites you to sail it, with boats which allow you to extend this route between the Andes and the Ocean towards the sea, to go beyond the limits of this new “happily habitable city-region”. The first steps to enter the “non-Pacific Ocean”. The poetic destination of this beauty belt is the Pacific Ocean.

A territory of a city-region that stretches from the “Ocean Sea” to the “Inland Sea” of the continent.

**Fig. 23**

City-Region that extends towards the sea-ocean and towards the inner sea of the South American continent.



#### 4.12 Indigenous cultural plurality

A city-region which hosts a cultural plurality [ref.27] and a respect for and protection of animals and nature.

Imagining that the imprint of the past is present, just as the original peoples, the *Mapuche*<sup>28</sup>, think today. For the natives, the present is to be lived, but the past is always present as in a rear-view mirror, which, looking forward, can be seen behind.

The future is to be foreseen.

For them, what is done daily, such as looking after the animals, cultivating the land, is not work..., it is life<sup>29</sup>.

Respect for nature must be redeemed from the original peoples, as a heritage that must be taken care of.

This paragraph intends to propose a residential area which looks at the present from the past and projects itself towards the future (a union of the indigenous world with the Western world). [ref.25]

#### 4.13 Nature as a protagonist

Nature is the protagonist of living (today some sociologists and anthropologists question the separation between nature and society and consider non-humans, plants and animals, to be players with full rights). Some contemporary philosophers promulgate a new perception of the world<sup>30</sup>, and that we must celebrate a new relationship with the other beings that live with us. The original peoples have much to teach us on this theme, they are bearers of “another knowledge”; who knows if through them we might identify the causes of the ecological catastrophe currently underway<sup>31</sup>.

This paragraph intends to propose the territory of a city that lives with other beings that forge nature and with which we could live together<sup>32</sup>.

Thinking of a territory for urban and administrative living in the city, the region and the country, in close relationship with nature, aware that an earthquake might occur.

Parks to walk in, sports areas and roads flooded with greenery that could start being built now for the Pan American Games of 2023.

A territory of a “City-Region” that builds an “open ground”, open to citizens, to nature, to animals (veterinarians will see to this).

A large single piece of ground (from the democratic “in common” of the congregation, full of the light of the profile [ref.19], the light for a new living, continuing with the luminous observation begun in the Pajaritos Chapel project, but shaped by different parts, different parts that forge a single «democratic sign with an inscription» to be established (like the congregation of the southern churches).

This essay therefore presents the territory of a city-region, which, starting from architectural interventions, can achieve the status of a “Happily Inhabited City-Region”, an “open ground” which recovers the joy of belonging to a new form of city. [ref.28]

Thinking of a new proposal of governability, given that the State should be reformulated towards forms of administration in which democracy can manifest itself more directly, without representatives, who do not usually represent the civic thinking of citizens; a representation today in crisis, therefore moving towards a more real, less formal, direct and non-representative democracy, in which the plebiscite modality is frequent, otherwise we may never escape from this crisis of civilization.

This is the lesson we can remain with after the pandemic, with the crisis of institutions leading to non-governability and the building of a distance between people that prevents the groupings which favour tragedies in earthquakes.

Being able to think of the great architectural elements that allow meetings of small and large groups outdoors, taking the experience gathered in the churches of the south, a sign of a democratic meeting in which no one is above any other, all at the same level in order to think of the country together, under new forms of government and its inscription (for example

those formulated by the “Demarchy”, a form of democracy now proposed by some, in which the participating citizens are drawn by lot), logically as a way that includes the new technologies of online communication, complementary to the idea of being face-to-face proposed here, in the form of assemblies such as the one proposed by the author of this essay for the 1997 *Claustro Pleno* (Congress of the entire Central University of Venezuela in Valparaíso, for that year), and the 2004 APEC (Congress of all the Pacific Rim countries) transformed into installations that shape from a distance thinking about the destination of this new “city-region”, between Santiago and Valparaíso, directing living anywhere from the Andes to the Pacific Ocean. [ref.26]

Places to discuss the present and the destiny of Chile in this Southern Cone of America, in an intertwining of disciplines, a laboratory of the future of democracy, in Chile. This is the favourable moment, the study of a new Constitution is beginning, and all these aspects can be considered.

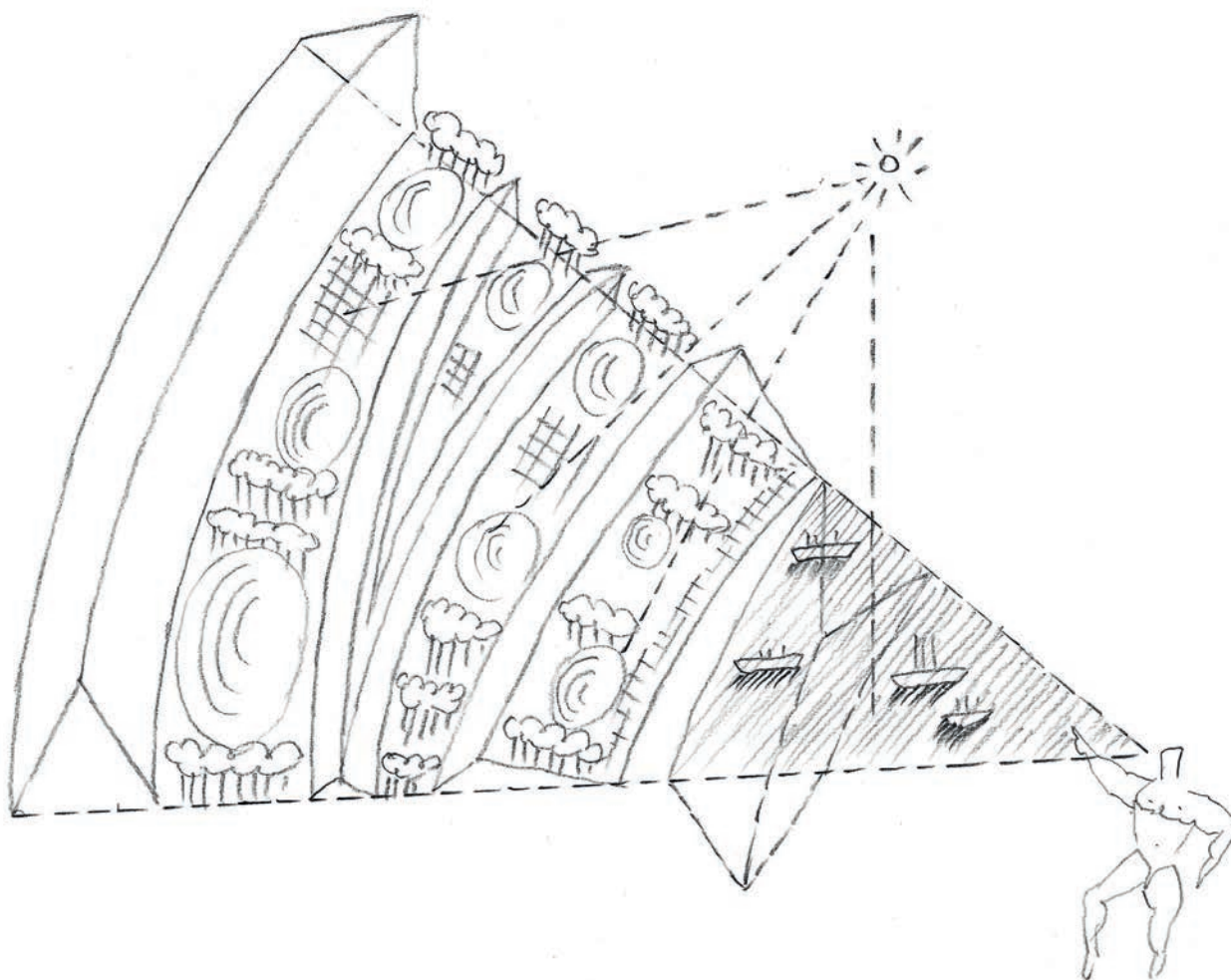
It could offer space for other South American countries to think of unity among themselves, a possible Latin-American Parliament.

Thinking not only of governability but of the tragedies that the Earth brings: earthquakes, tsunamis, floods, effects of climate change and finally being able to think of the United States of South America, and not, as now, the disunited states of South America.

**Fig. 24**

“Nature design”.

Living with nature and animals (with the plant kingdom and the animal kingdom).



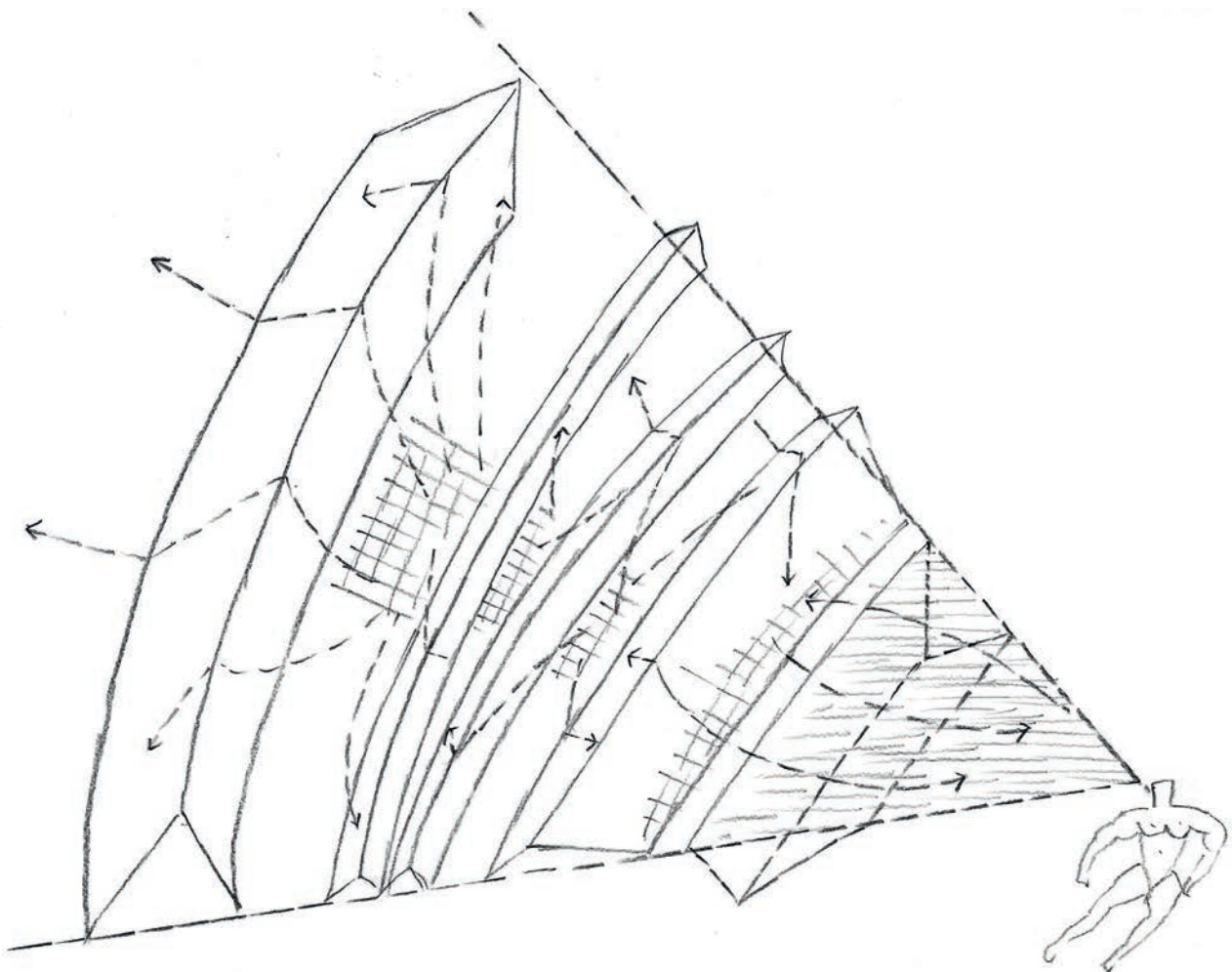
#### 4.14 An “open ground” design

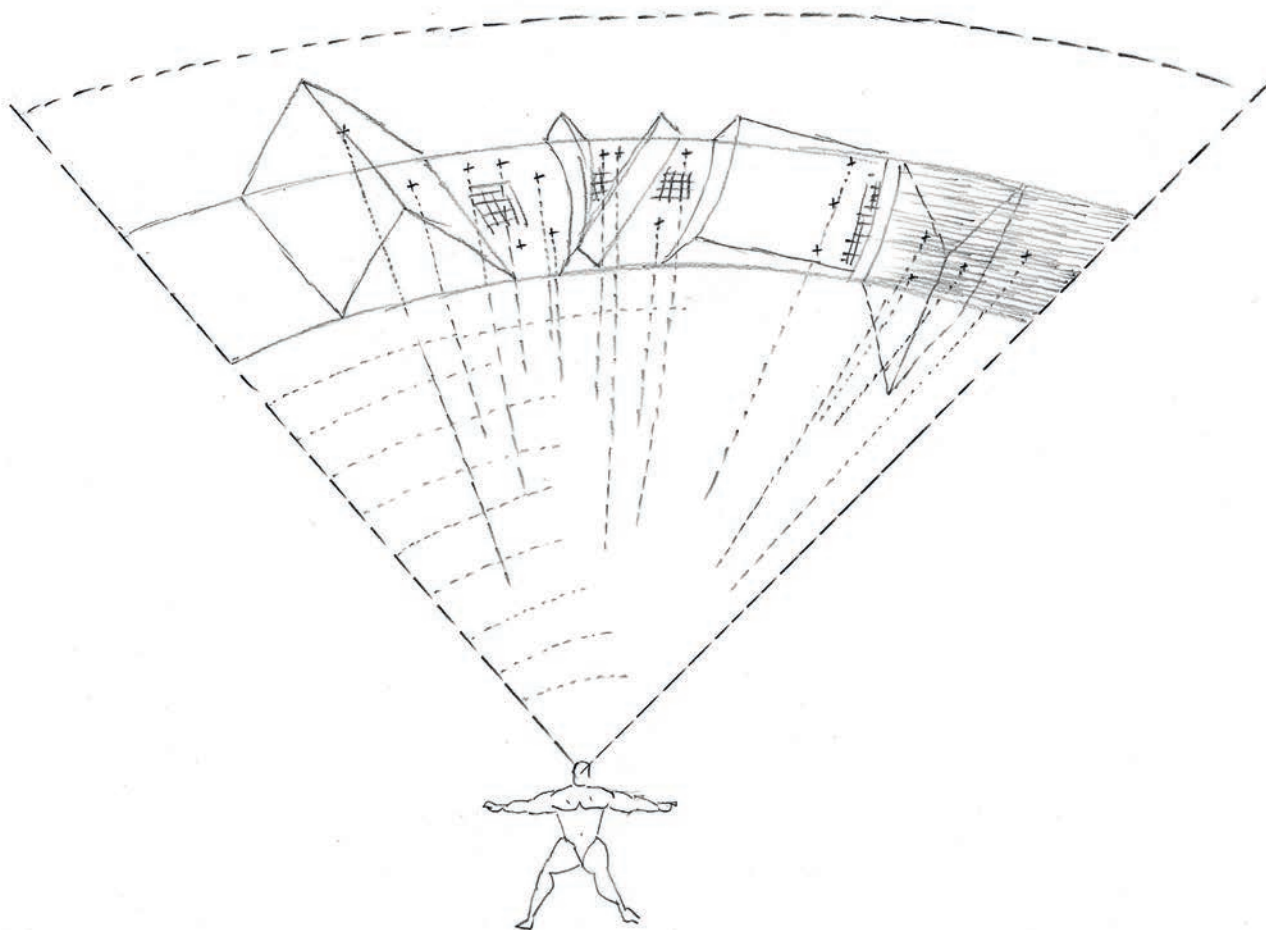
At the time of constructing the new churches in southern Chile, enormous changes were taking place, the congregation, an expression of a new democratic sense, and the city of Valparaíso which was never to recover, are events, the first positive and the second negative, that have built this world of ours.

Now a great change is desirable and necessary; we could say, a great virtual earthquake to shake the very foundations of society, the foundations of our life, and make us reflect on what it means to inhabit this land and not continue to live on it as if nothing was important enough to change, while instead we must move towards a new type of society and a new type of city. [ref.16] [ref.17]

For this idea of the city, some ideas for a new type of society and an invitation to other disciplines to think about it have been developed here, the artists (whom we shall see below) have already done so in their own way, but we also need the word of the poets, philosophers, geologists, geographers, scientists, and all those who could bring an orientation to this new time, on the land of a city-region that wants to aim towards happy living. The construction of a land which allows this America to be seen from the depths of the earth, and not only from the “inscriptions on the surface” (the extended plan of this new city-region, but also underground, looking for the origin of earthquakes, and through the dead..., who have much to teach us). [ref.29]

**Fig. 25**  
“Open ground”.  
City-region for a new society that  
can rethink “how” to live.





**Fig. 26**

Being able to see this city-region not only on the surface but also from the bottom of the earth (As Dante does when he comes out of hell).

## 5. The Sign

We have seen two architectural interventions after the earthquakes and an architectural proposal in preparation for this to happen, however, we can reflect on how the world of art “sees” the earthquake, perhaps this world has more capacity than the world of architecture to think of a meaningful “sign” a “signal” to reflect.

The “Sign” to transform the catastrophe of the earthquake into a creative force<sup>33</sup>.

Let us carry on to see the “Signs” in contemporary art:

### 5.1 The sign of *Athenea*

*Athenea* a sculpture (by Claudio Girola) at the meeting of two watercourses, forces of nature that meet in Santiago de Chile<sup>34</sup>.

The poet G. Iommi wrote: «Therefore, this city must work to ensure that its disasters are dealt with in such a way that adversity is transformed into a resource»<sup>35</sup>.

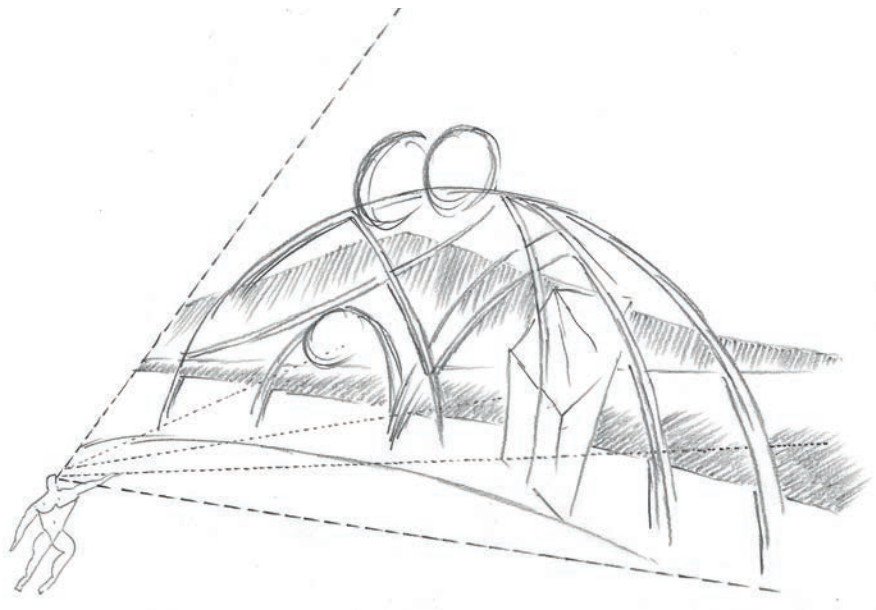
Looking for the “sign” [ref.10] that indicates *Amereida*, we read in the notes the poetic word written on the spot<sup>36</sup>.

A sculpture to be pursued beneath the pergolas, a living on foot with close-up gazes towards the sculpture with the eye in distant gazes towards the river and the hills, oblique gazes like those constructed in *Huinay*, a fishermen’s cove in southern Chile, (1970) where a tsunami carried the cemetery away, but the inhabitants continue to live there, with the dead submerged<sup>37</sup>. The *Huinay* “sign” is a tribute to the flood dead.

**Fig. 27**

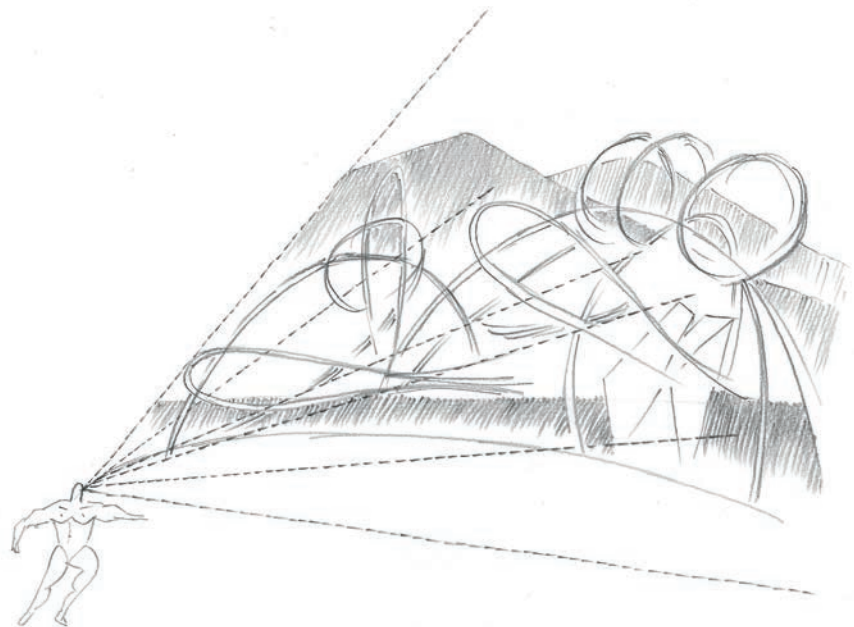
“Athenea”.

In the meeting of the two telluric geographic forms, the sguardo crosses the sculpture towards the waters and the mountains.



**Fig. 28**

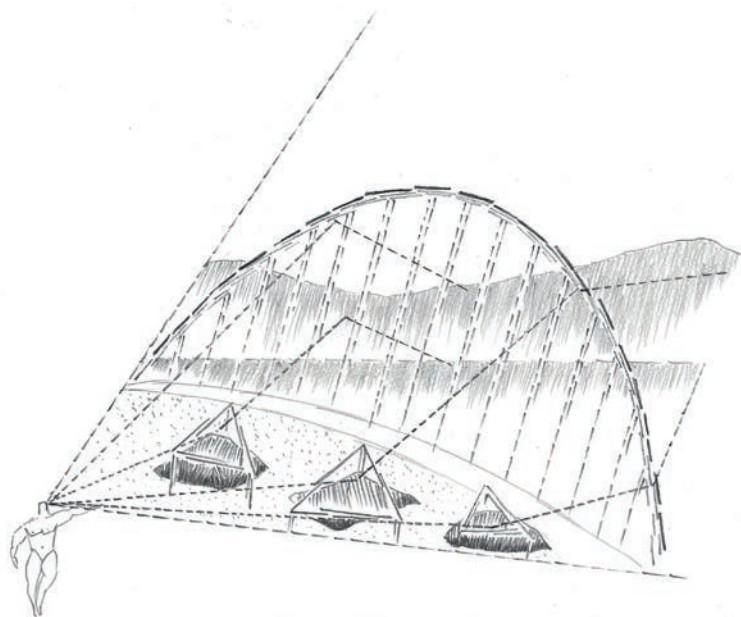
A look that rests on the lines of the sculpture to continue towards geography.



**Fig. 29**

“Huinay”.

Sign to remember the tsunami that submerged the cemetery and its dead.



**Fig. 30**

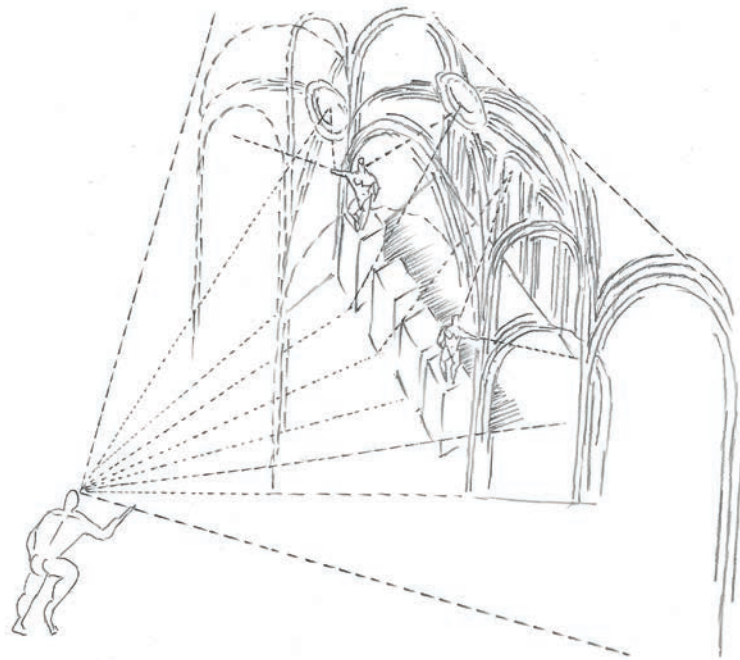
“Terraes Motus” in Caserta.  
In the Royal Palace of Caserta today the gazes of the palace meet with the works of “Terraes Motus”.

### 5.2 The “Sign” [ref.12] of *Terraes Motus*

In contemporary art, the *Terraes Motus*<sup>38</sup> exhibition in Caserta, Naples, appeared after the Irpinia catastrophe.

Lucio Amelio, a Neapolitan dealer in contemporary art, summoned the great artists of the time to transform the catastrophe of the earthquake into a creative force<sup>39</sup>.

A “Sign” of the earthquake in Caserta; works of art with a close-up gaze, and the palace of the Reggia, with its distant gaze, in a spatial union of oblique gazes between the old and the new.



### 5.3 The “Sign” [ref.13] of the *Cretto di Gibellina*

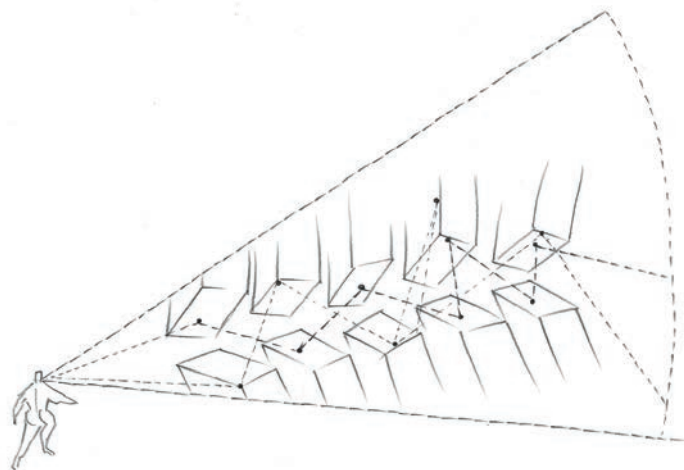
From the earthquake of the Belice Valley in Sicily; the great *Cretto di Gibellina* by Alberto Burri was born. A Land Art work 1984-89<sup>40</sup>.

Transforming the catastrophe into a work of art through a great creative force. A “Sign” indicating a village devastated by an earthquake; a “Sign” built on the very site of the earthquake, in its alleyways, inhabiting it with the foot and the eye, in near and far gazes, forging trajectories of gazes that coexist in harmony. [ref.5] “Silence with white, Burri wanted, not black, absolutely white is the light, the light of the crack, the light where darkness has occurred, the light that springs from the rubble, from the presence of death, and elevates the wound to the dignity of beauty”<sup>41</sup>.

**Fig. 31**

“Cretto”.

In the alleys of the town transformed by Burri into a huge work of art; the gaze flows into the labyrinth.



### Epilogue:

We have seen the reconstructions of churches in southern Chile after the 1960 earthquake; we have seen the case of the projects for Valparaíso after the 1906 earthquake; we have seen an idea of a utopian project for a city-region of happy living, which studies this land to predict earthquakes, on the 33<sup>rd</sup> parallel of Chile. Three gazes towards a luminous space through trajectories that seek to connect the foot to the eye in harmony to welcome the poetic word which says that it is this lack of harmony which makes this America an abyssal land [ref.5].

Each of the three key words at the beginning of this text receive a manifestation in contemporary art, manifestations which allow us to reflect from another point of view on what has been exhibited; one in Chile, the other two in Italy.

Sign: *Athenea*

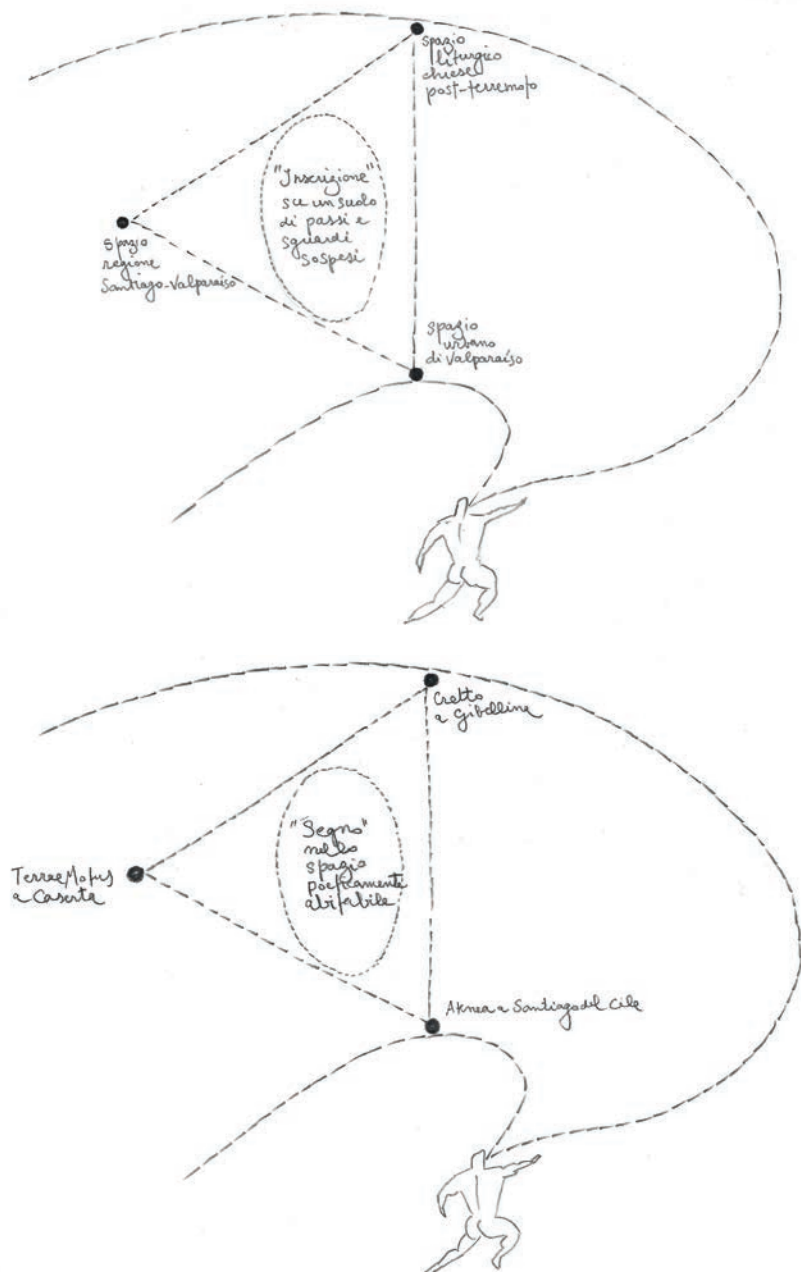
Light: *Cretto*

Gazes: *Terrae Motus*

#### Figs. 32-33

"Graphic inscription-earthquakes".  
Graphic sign that brings together the works (signs) presented.

"Sign-earthquake graphics".  
Graphic sign that brings together the works (signs of art presented).



\* The meanings of the keywords are intertwined...

\* For the relationship between the *Amereida* poem and the written text, the notes placed in square brackets [ref.xx] referring to the text are found alongside the lines.

\* Another widely used word is “inscription” which also comes from the poetic word of *Amereida*, in a particular reading of it. [ref.14]

## Notes

<sup>1</sup> See Heidegger M. (1994) – *Conferencias y artículos (Construir, Pensar, Habitar)*. Ed. Serbal, Barcelona; Heidegger M. (2005) – *Interpretaciones sobre la poesía de Hölderlin*. Ed Aliansa, Madrid; Heidegger M. (1958) – *Arte y poesía (El origen de la obra de arte y Holderlin y la esencia de la poesía)*. Ed. Fondo de cultura económica; Zweig S. (1959) – *Hölderlin*. GP, Barcelona; See also Cruz A. the boards of the “20 Anni” exhibition at the Museum of Fine Arts in Santiago de Chile: “Architecture co-generated with poetry... because the word is inaugural...”, “Man is unthinkable without a word and without a position... Position and Word-Architecture and Poetry... it seems to us that the human condition is poetic, for it, man lives freely and without stopping on the eve and [finds] the courage to build the world... “ See also the work of the Mapuche poet Elicura Chihuailaf, who obtained the 2020 National Prize for Literature with a contribution on indigenous epistemology; Vv.Aa. (1967) – *Amereida. Volumen primero*. Editorial Cooperativa Lambda, Santiago de Chile; Iommi G. (1982) – *Eneida-Amereida*. Instituto de Arte U.C.V., Valparaíso; Cruz A., Barla B. (2004) – *Amereida-Palladio. Carta a los arquitectos europeos*. Ediciones Universitarias de Valparaíso.

<sup>2</sup> In this essay, ‘America’ is taken to mean the entire continent: North America and South America or Latin America.

<sup>3</sup> *Amereida*: all of Latin America was occupied by the Spaniards along its edges to better defend the settlements. See Vv.Aa., *Amereida*. Ediciones e[ad] PUCV, 2011.

<sup>4</sup> The poetic vision of the constellation of the “Southern Cross” marks the Pacific Ocean as an adventure. See Vv.Aa., *Amereida*. Ediciones e[ad] PUCV, 2011.

<sup>5</sup> Vv.Aa. (1967) – *Amereida. Volumen primero*. Editorial Cooperativa Lambda, Santiago de Chile.

<sup>6</sup> O’Gorman E. (1992) – *La invención de América*. Ed. Fondo de Cultura Económica, México; Errazuriz Zañartu J. (2000) – *Cuenca del Pacífico. 4000 años de contactos culturales*. Ed.U.C.de Chile; Góngora M. (1975) – *Studies in the history of Spanish America*. Cambridge University Press; Cruz A., Iommi G., et al. (1971) – *Para un punto de vista latinoamericano del Océano Pacífico*. Es.Arq. UCV Revista de Estudios del Pacífico [www.ead.pucv/escuela/amereida]; Iommi G. (1984) – *El Pacífico es un mar erótico (Conversación en la Ciudad Abierta a propósito del Pacífico)* 1984, published on the school’s site [www.ead.pucv/escuela/amereida].

<sup>7</sup> The “*Leyes de Indias*” [“Laws of the Indies”] were promulgated by the Spanish monarchy to regulate the social, political and economic life of its colonial territories in South America. Ed Cultura Hispánica 1973.

<sup>8</sup> García B. M. (2006) – “El discurso poético mapuche”. *Revista Chilena de Literatura*, 68. Ed universidad de la Frontera.

<sup>9</sup> America was a gift to the world, Europe was looking for the Indies and found this land not realizing it was a new continent; Columbus never knew he had arrived in an unknown land, he thought he had arrived in the Indies.

<sup>10</sup> We don’t have roots like Europeans; here in America the historical development from its origins was interrupted with the arrival of Europe.

<sup>11</sup> Maturana H., Varela R. (1984) – “Ontología del lenguaje”. in: *El árbol del conocimiento*. Ed. Universitaria, Santiago del Chile.

<sup>12</sup> Brighenti T. (2018) – “La Scuola di Valparaíso: l’osservazione, l’atto e la forma. L’insegnamento dell’architettura come pratica costruttiva”. in: *Idem Pedagogie architettoniche. Scuole, didattica, progetto*. Accademia University Press, Turin, pp. 25-75.

<sup>13</sup> Sentence taken from Alberto Cruz’s personal notes from 1961 in which he speaks about the Jesuit Church of Puerto Montt.

<sup>14</sup> Mistral G. (1936) – *Geografía Humana de Chile. Discurso en la Unión Panamericana Washington 4/1936*, [Bibliotecanacionaldigital.gob.cl]; Neruda P. (1960) – “Terremoto en Chile”. in: *Idem, La Barcarola*. Ed. Losada, Buenos Aires; Parra V. (1961) – *Toda Violeta Parra. (An anthology presented by Alfonso Alcalde)* Vol. VIII del Folklore de Chile.

- <sup>15</sup> José Vial stated that “... the work brought great problems with the local authorities of the Jesuits, who did not accept the new form of the church, saying that the transformations did not belong to them and that they would not return to using the church, saying that they would never reconcile the old with the new; the faithful did not like it either, some because the transformed church was not the same as the old one, others because they would have preferred a brand-new church, which would have cost even less, and would have been better... only some (it is not known how many...), would make it their own. Sentence taken from personal notes of José Vial written in 1961.
- <sup>16</sup> Compared to the regularity inherited from the Roman *castrum*, the “ideal city” of the Renaissance brought to America from Spain was not evident in Valparaíso, a port city which had grown haphazardly.
- <sup>7</sup> Pablo Manuel Millán-Millán (2015) – *Los Planes de reconstrucción de Valparaíso (Chile), tras el terremoto de 1906: la búsqueda de la modernidad en el trazado urbano*. in: Biblio3W, Revista Bibliográfica de Geografía y Ciencias Sociales, Vol XX no.1.129.
- <sup>18</sup> Munford L. (1966) – *La ciudad en la historia, sus orígenes, transformaciones y perspectivas*. Infinito, Buenos Aires.
- <sup>19</sup> Waisberg M. (1999) – “El multifacético patrimonio d Valparaíso”. in: *Monumentos y Sitios de Chile*. ICOMOS-CHILE, Ed. Altazor, Santiago de Chile, p. 153.
- <sup>20</sup> Hernandez M. M. (2005) – “Un texto de Immanuel Kant sobre las causas de los terremotos (1756)”. *Evsal Revistas* Vol. 6, nov. 23, Ed. Universidad de Salamanca 2005.
- <sup>21</sup> Rocío Peñalta Catalán R. (2009) – “Voltaire: una reflexión filosófico-literaria sobre el terremoto de Lisboa de 1755”. *Revista de Filosofía Románica*, vol. 26 pp. 187-204.
- <sup>22</sup> The “Inland Sea”, the vast interior of Latin America described in *Amereida* (an epic poem by various authors). See Vv.Aa., *Amereida*. Ediciones e[ad] PUCV, 2011.
- <sup>23</sup> Valéry P. (2000) – *Eupalinos o el arquitecto / El alma y la danza (La balsa de la Medusa)*. Ed. A. Machado Libros, Madrid.
- <sup>24</sup> See Barla B. (2020) – “Verso una megalopoli felicemente abitabile. Quattordici ritratti e scenari poetico-architettonici di una città globale, Santiago del Cile”. Singola. *Storie di scenari e orizzonti*, [<https://www.singola.net/pensiero/santiago-verso-una-megalopoli-abitabile-bruno-barla>].
- <sup>25</sup> Norberg-Schulz C. (1991) – *Genius Loci: Towards a Phenomenology of Architecture*. Rizzoli, New York.
- <sup>26</sup> The Italian writer Erri De Luca speaks of the earthquake as “a shipwreck on earth” referring to the tremors which struck Central Italy in 2016.
- <sup>27</sup> Barla B. (2020) – “Quando il virus se ne andrà, una relazione utopica tra Virus, Vizi e Virtù. Verso la costruzione di un mondo migliore”. in: Sestito M., *Scenari post pandemia. Arte. Architettura. Utopia*. Timia, Roma.
- <sup>28</sup> See Castro Martínez A. (2021) – “El mapuche en la ciudad”. *Le Monde Diplomatique [Chile]*, 226, p. 8.
- <sup>29</sup> See García Barrera M. (2006) – “El discurso poético mapuche y su vinculación con los ‘temas de resistencia cultural’”. *Revista Chilena de Literatura*, 68, pp. 169-197.
- <sup>30</sup> Cavieres C. A. (2020) – “¿Cómo avanzar hacia la protección de la naturaleza?”. *Le Monde Diplomatique [Chile]*, 223, p. 14.
- <sup>31</sup> Poupeau F. (novembre 2020) – “El ambientalismo de los ricos”. *Le Monde Diplomatique [Chile]*, 223, p.15.
- <sup>32</sup> In some countries like New Zealand, the constitution recognizes the right of some rivers, giving them unprecedented legal status by equating them to a person. See Carasco Hidalgo C. (2020) – “La luz al final del camino para una recuperación verde”. *Le Monde Diplomatique [Chile]*, 223, p.11.
- <sup>33</sup> See Claro A. (2014) – *Tiempos sin fin*. Ediciones Bastante.
- <sup>34</sup> ATHENEA: A monument placed at the intersection of two rivers (Maipo-Mapocho) in Santiago de Chile, made by A. Cruz, M. Eyquem, G. Iommi, C. Girola, V. Boskovic, March 1990 ARQ March 14, 1990.
- <sup>35</sup> «The name of this monument is *Athenea*: because it ‘signals’ what it meant for the Greek city and continues to mean for any city to this day. *Athenea* had her place on the Acropolis; this is what happened in Athens and from there she indicated to the city that adversity must be transmuted into necessary coexistence, pointing out that what appears as adverse must be dealt with as such to transmute it into something favourable, into a source of peace. The *Cordillera* brings down catastrophes from it, but at the same time gives Santiago a light that bathes it with its splendour, a splendour which

comes from the high illuminated peaks, and which makes it that light mentioned in the poem. Consequently, this city must work to ensure that its catastrophes are dealt with in such a way that adversity is transformed into a resource like that named 'light'». (Iommi G.1990).

<sup>36</sup> *ATHENEA*

1. *cual promisorio*
2. *o detrás*
3. *cercada luz*  
*-el secreto no registra-*
4. *Aún otra*
5. *intima*
6. *se dice a si*  
*conmoviendo la apariencia*
7. *Tal antaño*  
*por nieves negras*
8. *al hilo*  
*ciñe*  
*ciegas*  
*libertades*  
*recurrentes*
9. *Esta tierra guarda*  
*El silencio inviolable de su eco*
10. *y vedada*  
*Se enamora de sus gentes*
11. *Lampara*  
*Que todo olvido vuelve*

\* *Notas al poema "ATHENEA"*

1. *Aún la catástrofe encierra una esperanza: lo promisorio*
2. *La Cordillera, el fondo o el detrás de la ciudad construye, cercando como un vaso abierto la luz magnífica de la ciudad*
3. *Pero a primera vista la razón, la causa de ese efecto-el secreto-no se registra*
4. *la tierra se hace a si misma otra*
5. *cuando tiembla*
6. *ella se dice si misma al temblar conmoviendo la apariencia*
7. *desde siempre las nieves cordilleranas*
8. *se deslizan en hilos (Mapocho, Maipo) y encauza ciñe las aguas libertadas violentas, recurrentes,*  
*Por esos lechos bajan a su vez las ondas telúricas.*
9. *Pero este lugar cuida el silencio del eco que se produce entre su estremecimiento y su permanente presencia segura,*
10. *Como si al temblar indicara que nadie puede poseerla (pues ella es sólo eco de sí misma) y así de algún modo vedada toma distancia para enamorarse de sus gentes.*
11. *Cordillera, ríos, conjunción de ambos en el San Carlos que une el Maipo al Mapocho, son la lámpara que recuerda la destinación de la ciudad.*  
*Por eso que todo olvido, querer olvidar, gracias a ese peculiar modo de ser lugar, el destino vuelve*

<sup>37</sup> Bruno Barla et.al., "Travesía a Huinay". A *Travesía* carried out with the architecture students at the Valparaíso School in which a work of architectural opening was built in homage to the now submerged dead.

<sup>38</sup> *Terrae Motus*: from the Irpinia earthquake a contemporary art collection of the most famous world artists of the 1980s was born. See the *Salotto dell'Arte*, 2016 [<https://www.ondawebtv.it/>].

<sup>39</sup> The artists taking part were: Beuys, Warhol, Mapplethorpe, Pistoletto, Jannis, Kounellis, Paladino, Haring, Rauschenberg, Paolini, Cucchi, Fabro, Condo.

<sup>40</sup> Arendt H. (2005) – *La condicion humana*. Editorial Paidós, Buenos Aires.

<sup>41</sup> Massimo Recalcati and Aurelio Amendola Massimo: *Alberto Burri. Il Grande Cretto di Gibellina*, Galleria Nazionale dell'Umbria Perugia, 2 November 2018.

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Bruno Barla Hidalgo, was born in Valparaíso in 1947, from a Ligurian father and a Chilean mother. Immediately after his degree, obtained in 1974, he took part in the “Amereida” group becoming a professor at the Catholic University of Valparaíso where, together with poets, sculptors and painters, he will rethink living in the South American continent, in the relationship between architecture and poetry, through journeys that cross the continent to reach the places indicated by the poetic word for the purpose of constructing light works of openness to architecture. This architectural implementation takes him to Europe, to Palladio's Veneto, where he observes his villas through drawings, publishing numerous scientific contributions and participating, as a guest, in international conferences between Europe and Latin America. In 2016 he completed his doctorate at the Re Juan Carlos University in Madrid by developing a research work on a reinterpretation through the South American poetics of Palladio's villa “La Rotonda”. In his professional life, he has made numerous architectural works between Valparaíso and Santiago de Chile.

Carlo Quintelli  
**To retrace the paths of Giuseppe Samonà.  
 A book following two exhibitions and a conference**

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Author: AA.VV.

Edited by: *Giovanni Longobardi, Giovanni Marras*

Title: *Giuseppe Samonà*

Subtitle: *Progetti per la città pubblica.*

Language: *italian / english abstract*

Publisher: *Dipartimento di Architettura di Roma Tre / Archivio Progetti IUAV / Universalia Pordenone*

Characteristic: *Format 23x17 cm, 156 pages, paperback, color*

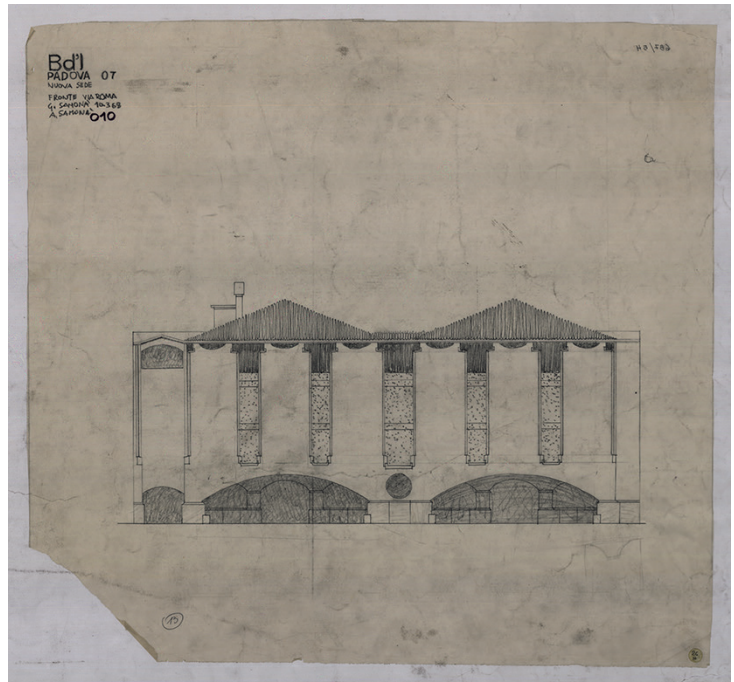
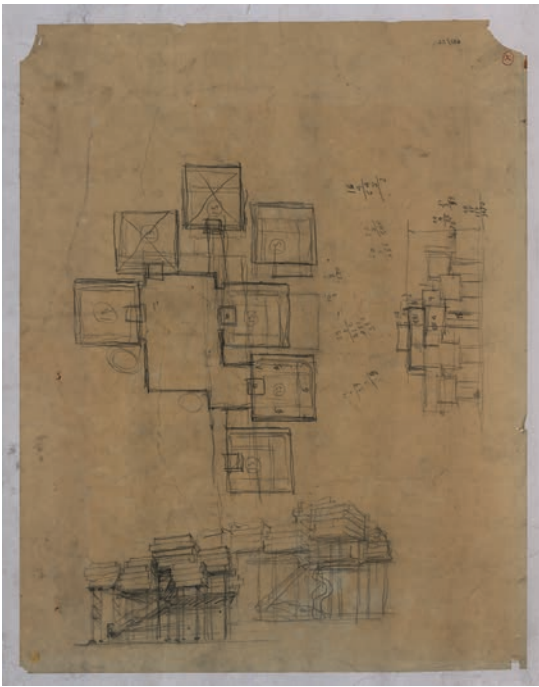
ISBN: *978-88-941359-8-5*

Year: *2020*

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It is understandable the difficulty in framing the publication “GIUSEPPE SAMONÀ ‘projects for the public city’” in a specific non-fiction genre, edited by Giovanni Longobardi Giovanni Marras, when the subject concerns the Master who gave life to the IUAV tradition through an extraordinary multiple cultural, theoretical, didactic, design expressions, all pervaded by a repeated desire for knowledge. In the combination of two exhibitions and a conference held in 2018, in which the Department of Architecture of Roma Tre and the IUAV with the Projects Archive concur, the book seems to play a further stimulating function especially for students and younger scholars on the actuality of that hermeneutics which for Samonà involves all the scales and components of the architectural, urban and territorial scene almost an impossibility, now as then, of being able to carry out the work of the architect in the key of a positivistic specialism. Within a framework, that “for the public city”, as the subtitle states, which highlights the ethical and political purpose of the experience of this intellectual, happily transplanted from the southern Mediterranean to the lagoon dimension of the “dominant”, the series of short chapters of the volume indicate the paths from 1949 to 1983 through which his activity produced and above all gave rise to further school research. In that IUAV intended above all as a great laboratory of comparison and cultural elaboration of a high educational level. Hence the questions of how to conceive a post-academic school of architecture, in an Italian key without Bauhausian replicas, on the basis of an interpretative practice adhering to reality and of a transcalar nature in the application of an experimental design exercise as Giovanni explains. Marras, one of the most qualified exegete of the Samonan cosmos; the typological aspect is also central, underlined by Giovanni Longobardi, where the design experiments on the epochal theme of the “business center” emerge through various projects, including the one for Turin (1962) which plays so much part of the reflection on modernity investigated by Francesco Tentori through his “Learning from Venice”<sup>1</sup>; no less important is the figurative response of the projects also carried out, according to an iconic tension capable of bringing urban materials on the same semantic level, between projects in the Veneto area (Pujia) and in the land of Sicily (Lombards). Serena Maffioletti recalls the Samonà “captain of fortune”, according to the vivid definition of Carlo Aymonino,



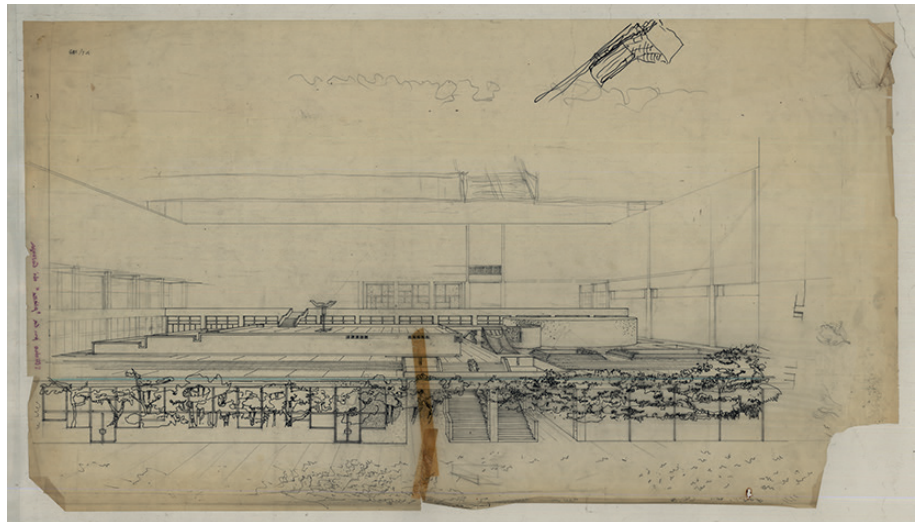
**Figs. 1-2-3**

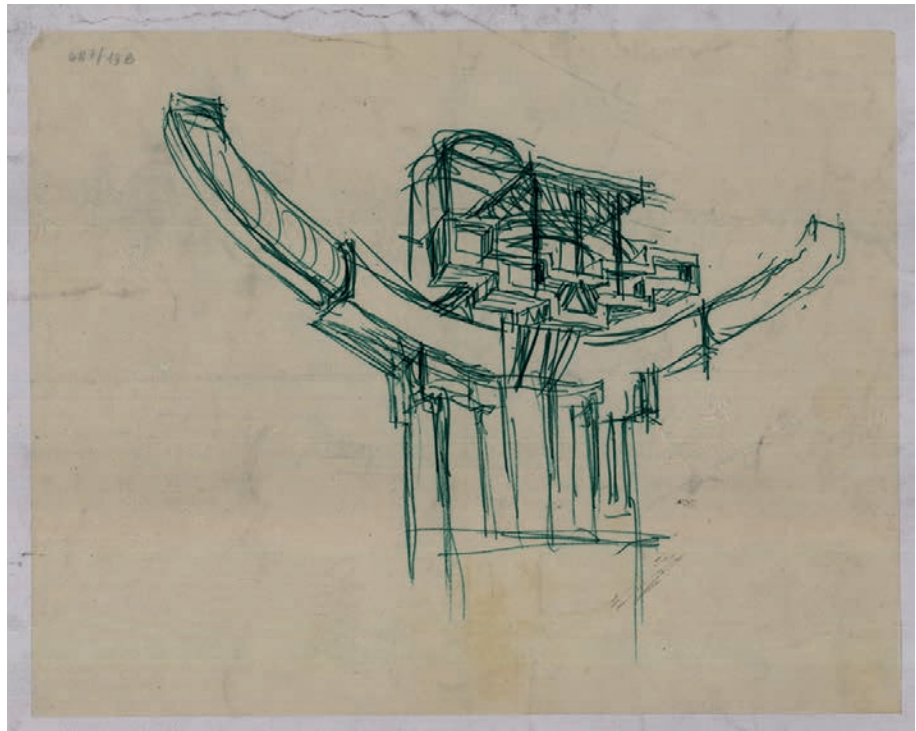
New headquarters of the offices and library of the Chamber of Deputies in Rome, national competition, 1967, first prize ex aequo,

G. Samonà with A. Samonà. Andrea Samonà and Livia Toccafondi Collection, Rome.

New headquarters of the Bank of Italy in Padua, 1968, G. Samonà with A. Samonà, G. Pizzetti. Andrea Samonà and Livia Toccafondi Collection, Rome.

New University of Calabria, international competition, 1973, G. Samonà with C. Ajroldi, C. Bedoni, F. Bedoni, M.A. Chiorino, M. Di Falco, G. Fartaglio, R. Lucci, M. Salvia, A. Samonà, F. Tentori, L. Toccafondi, E.R. Entrenched. Andrea Samonà and Livia Toccafondi Collection, Rome.





**Fig. 4**

Study sketch of the pylons for the stable road-rail link between Sicily and the continent 1969. Andrea Samonà and Livia Toccafondi Collection, Rome.

bringing out that combinatorial alchemy of a recruitment as heteronomous as culturally excellent between personalities with marked but differentiated qualities such as Trincanato, Scarpa, Astengo, Zevi, Piccinato, Gardella up to Saverio Muratori in counterpoint to that very young De Carlo, the bearer of renewed modernist instances, whose nemesis will be seen in the project for Mazzorbo. The book in the second part reports the usual acute introspection of Franco Purini with an accent, almost a suggestion of research, to the relations of the Sicilian master with Giovannoni, Piacentini and the philosopher Adolfo Omodeo. No less significant is the contribution of Vieri Quilici, of historical contextualization of the work of Samonà among the new themes of a settlement that becomes territorial but at the same time of a renewed attention, first of all on the models of an operational interpretation, for the historic city. The testimony of the Samonan followers is Luciano Semerani who together with Polesello, Dardi and others has conferred on the continuity of character of that school until the end of the twentieth century and even today. I was a young PhD student at the IUAV in 1984<sup>2</sup>, so a few months after Samonà's death, we were not yet carried away by the equivocal rhetoric of sustainability, vertical greenery, bigness, and in that climate I still remember today in the words, in the ways, but especially in the topics that the college of teachers submitted to us what I like to define the spirit of Samonà, its authenticity of problematic arousal used as a maieutic key. What this little book, enriched by an extraordinary supply of images and drawings, even unpublished, continues to reiterate its inexhaustible relevance.

## Notes

<sup>1</sup> F. Tentori, *Imparare da Venezia*, Officina, Rome 1994.

<sup>2</sup> The first cycle of the PhD in Architectural Composition at the IUAV (1983-1986), in consortium with the Milan Polytechnic and the University of Naples, had a Board of Professors composed of E. Battisti, G. Canella, A. Drugman, G. Grassi, G. Polesello, A. Rossi, A. Samonà, L. Semerani, U. Siola and with F. Tentori as coordinator and M. Montuori as secretary.

Michele Sbacchi  
**Giancarlo De Carlo. A challenging master**

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Edited by: *Antonietta Iolanda Lima*

Title: *Giancarlo De Carlo. Visione e valori*

Subtitle: *Atti del convegno Giancarlo De Carlo scomodo e necessario, Palermo-Catania 2018*

Language: *italian*

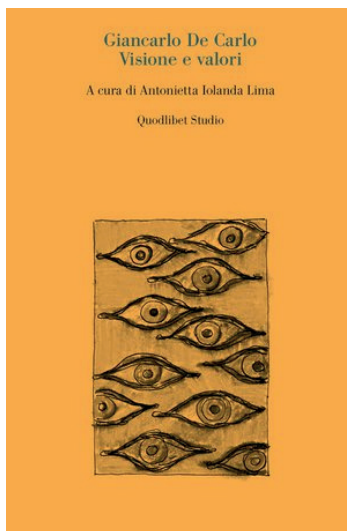
Publisher: *Quodlibet Studio. Città e paesaggio. Saggi Architettura, Urbanistica*

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Year: *2020*

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Giancarlo De Carlo stands out as a singular presence in the Italian architectural scenery. Not by chance his role turns out to be much more defined and easily recognizable within the wider European – if not global – realm than in the Italian one.

Despite De Carlo's position has been properly acknowledged in Italy, his cultural role has been wilfully collateral and critic and, at any rate, uncommon. This peculiarity is certainly an eloquent proof of his high intellectual status. A status which has been definitely autonomous and personal and therefore yet to be cleared.

Quite rightly Antonietta Lima defines him as “uncomfortable” in the title of the conference *Giancarlo De Carlo scomodo e necessario*, which she has organized quite appropriately in Palermo and Catania in 2018. These two cities are not occasional places. They are significantly linked to De Carlo's life, who indeed worked for several years in Palermo at the Urban Plan for the historic city. And later he was in Catania at length attending the project for the conversion of the Benedictines convent. In both places De Carlo undertook intense human relations with significant groups of people, some of which have authored essays in this book.

Sicily, as a whole, has been a special place for him. He had Sicilian grandparents and he had been grown up within the clannish Sicilian community in Tunis. A nostalgic curiosity for his own past and the later complex and somehow troublesome experiences in Palermo and Catania led him to often reflect upon this island to the point of dedicating in 1999 an entire book to the topic, *Io e la Sicilia*. In it he investigates his own uneasy relationship with a land, as well as with a society, both felt intimately as his own. The volume edited by Lima, therefore joins, with an original twist, the numerous other books and essays recently published in connection with the centennial of De Carlo's birth, much as those produced immediately after his death, occurred in 2005.

But in addition to the parts dedicated to Palermo and Catania, the text encompasses also other essays focused both on general aspects of De Carlo and on specific ones: the project for Mazzorbo in the Venetian lagoon, the various interventions within Urbino, the plan for Rimini and the Matteotti Village in Terni are just some of those. The latter is remarkably written by one of the protagonists of that experience, the sociologist Domenico De Masi.

All these studies face mainly the political and cultural dimension of De Carlo, within the realm of architecture. But almost always significantly they extend beyond the edge of the discipline, a too limited precinct for De Carlo's extended approach.

With reference to this I find useful to point out how these various papers do nothing but stress and complete the general aim of the collection, quite clearly stated by the editor in the not less than three essays under her signature. It is set as a focus on the political and cultural independence of De Carlo. This was strongly sought throughout his own life by the idea of «an architecture which does not reflect the power». So Lima writes: «De Carlo, much as few other architects, would persuade us to refuse any enslavement to the power. He would rather drive us to use “morality” both in life and in art. Looking simultaneously to local and global and always confronting with other disciplines».

After all, as is well known, De Carlo was anarchist: the development of his thought from Koproktin, passing through Thoreau and Whitman, but also Geddes and Mumford is successfully treated in the book.

His attitude, simultaneously cosmopolite yet mindful of context and vernacularity, had been certainly influenced by Giuseppe Pagano who led him to reflect upon rural architecture. This awareness will generate projects like the one for Spine Sante public housing in Matera, and, much later, for Mazzorbo in the island of Burano.

In these projects, as well as elsewhere, De Carlo assumes a totally civil spirit and rejects the popular cliché of an architect that is contemporary “by image”. He rather fixes the inhabitants' needs as his primary goal living any urge for authorship in the background if not out of the process. Architectural language, quite clearly, was for him a no-problem.

The urge for participation, therefore, for De Carlo was not a mere pragmatic issue. As this book well clarifies, participation in architecture stood for him as an utmost ideologic issue. It sprang from his very idea of architecture – and, more importantly, of society. As in his own words architecture produces “concrete images of how space could actually be if the structure of society was different”.

His conception of public space as intertwined with the private space of the house is shaped around an undeniable “architecture for people”. His interventions in Urbino, much as the labyrinthic structure of the Matteotti Village in Terni or the city-building of the Benedictines in Catania are therefore thought considering the complex spaces of Islamic – and not only European – cities. The vision of a reversibility between city and house, as well as between public and private cannot surprise us: it comes from the idea of *mat building*, notoriously by Alison Smithson, and widely experimented within the Team X, especially by Candilis, Josic e Woods. To this respect it is important to stress that in De Carlo's view the notion of *mat building*, also successfully defined “casbah + meccano,” was not a mere architectural device: behind it, for De Carlo, stood something even more important than architecture itself. It was the unmissable idea of an urban space as the outcome of the freedom of man within the complexity of society.

To this respect it is far too consistent that the fusion of architecture and urbanism was for De Carlo an amply practised cornerstone, rather than only a concept.

His urban plans were grounded on forms and qualities, as against the quantity bureaucracy of zoning, supported by the circle of Astengo.

De Carlo's notion of “tentative project” was a way of keeping together the

complexity of reality as against the “scomposition” of analytic approach. Yet for De Carlo architecture had to set a limit: it should rigorously refrain from becoming an imposition of power. This was for him an irrevocable rule that made him experience painfully his role in public projects: in Matera, in Palermo, as well as in Terni or Burano architecture could never become a matter of imposition from above.

If the connection between power and architecture became hidden, as in the case of the Urban Plan for Palermo, developed with Giuseppe Samonà, for De Carlo the issue assumed a rather grim overtone.

This is not surprising: the relationship with power for an anarchist like him was the structure around which was shaped his whole life.

He felt uncomfortable in the Italian academia where power overlaps culture on an almost daily basis. This condition was strongly criticised since 1968 in his *La piramide rovesciata*.

This incompatible condition was one of the reasons for the establishment of the ILAUD, a liberal form of teaching and research on architecture. Similarly, he acted with the direction of “Spazio e società” magazine, that tried to contrast the lobby of the two main Italian architectural magazines to which he had no access.

He had his main human relations abroad and not in the Milanese circle where he lived and worked. In Italy he definitely was an outsider, “inconvenient yet necessary” as this book well clarifies.

Claudia Mainardi  
**Federica Doglio in a dialogue with Mirko Zardini:  
 A book interview on crises during a crisis**

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Authors: *Federica Doglio, Mirko Zardini*

Edited by: *Federica Doglio*

Title: *Dopo le Crisi*

Subtitle: *1978, 2001, 2008, 2020*

Language: *Italian*

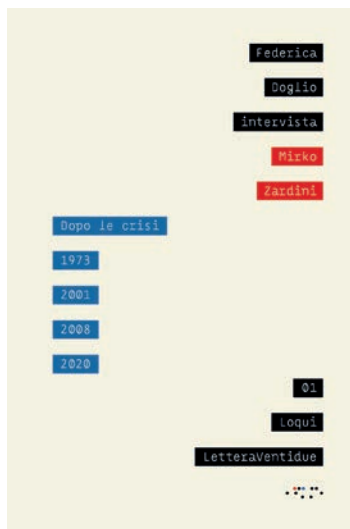
Publisher: *LetteraVentidue*

Characteristic: *Format 10x15cm forma, 128 pages, paperback, monochrome*

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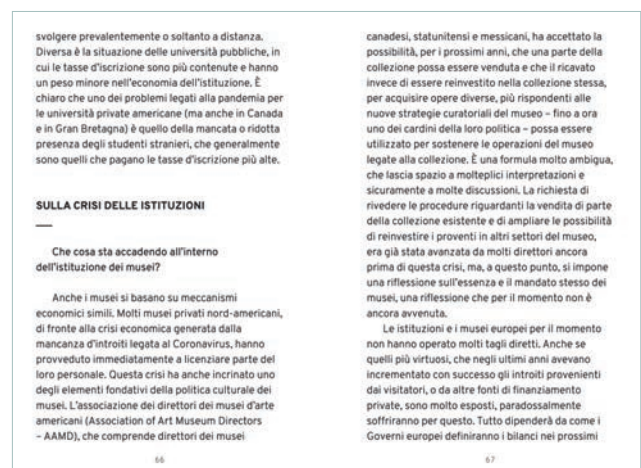
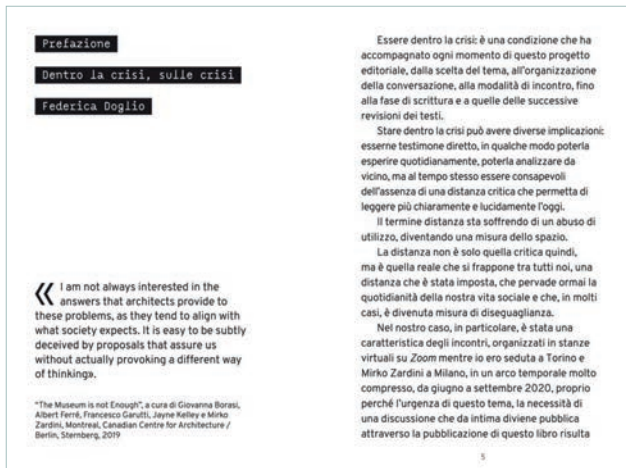
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*Loqui* is a new series of thematic interviews reflecting on the theory and practice of architecture and design. The first issue is titled *After the Crises: 1973, 2001, 2008, 2020*, and is the result of a conversation conducted via webcam over the months of the Covid-19 lockdown between the author of the book, Federica Doglio, and Mirko Zardini: architect, author, curator, and director of the Canadian Centre for Architecture (CCA) in Montreal from 2003 to 2019.

In little more than 120 pages and in low-cost paperback format, to be read anywhere by anyone who is living through the crisis, the author chooses to intervene as little as possible on the interview text so as to ensure a conversational tone, while picking out specific sections, the titles of which make it possible to introduce and better understand the various themes addressed.

The ongoing global pandemic and its impact have been inevitably, continuously and perhaps excessively discussed over the past year. However, the intention of this book interview is different: the volume does not intend to propose a response to ongoing events but uses the current conjuncture as a pretext to reflect on the crisis in its multiple aspects and meanings, questioning the implications for society and, consequently, for the profession. In a certain sense, it uses the crisis as a paradigm, a lens through which to reread the history of the last fifty years. In this perspective, the condition we are going through does not seem surprising or unexpected; on the contrary, it is read within an articulated and complex system of dynamics that stretches back at least fifty years. According to Mirko Zardini, in fact, “crises do not introduce new ideas or paradigms, but they function as accelerators of trends already underway.” Current acts are therefore reread in the light of events that belong to the recent past: the energy crisis that, in 1973, marked the end of the economic boom and introduced a new season of reflections on measures by which to safeguard the environment; the terrorist crisis in 2001, which led to a drastic acceleration of control and surveillance policies; and the financial crisis in 2008, which entailed a radical change in professional practices and the role of the architect. According to the author, in fact, at that moment the season of exuberance came to an end and the decline of a model built around the paradigm of the starchitect began. This reflection is expanded upon in the book and read in relation to



**Figs. 1-2**  
 Excerpt of book preface.

Excerpt of book inner pages.

the crisis of the educational project and cultural institutions.

For each crisis, the spatial and lifestyle repercussions are emphasized. In this sense, concerning the current health crisis that began in 2020, the inadequacy of urban and architectural interventions of recent decades is highlighted, giving rise to the need to intervene in order to improve livability and environmental quality.

As Federica Doglio anticipates in the opening pages: “what emerges is a crisis of modernity, of the modern project and of the very idea of the project.” The contextualization of the crisis that emerges from the publication highlights the profound reflection that Mirko Zardini has developed throughout his professional career, starting from his roots and in particular over the last fifteen years as chief curator and director of the CCA, always in an attempt to address contemporary issues (environment, participation, technological research, housing, migration, health, and social injustice), often anticipating dynamics that would later turn out to be correct.

Finally, a bibliography made up of essays, books, and brief notes is intended to provide the reader with tools for further study. Here in chronological order, all the projects, publications, and exhibitions mentioned by Zardini during the interview are listed, as well as the texts from his own personal library mentioned and evoked during the conversation.

The success of this book interview lies in its being as direct and colloquial as well as rich in new insights and perspectives. On the one hand, the interviewee shares ideas and reflections with great generosity, couching his personal experience within recent history in a punctual, precise, and clear manner; on the other, the author manages to put the reader at ease, as if they were not alone in front of the webcam.

