

Restoring the Fundamental Values to Face the Critical Issues of Contemporary Architecture. The Development of a Method

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Lede: The doctoral research examines why contemporary Architecture struggles to convey its values and proposes a method to restore fundamentals by conceiving Space and Form in communion with Art and History

Contemporary Architecture faces two main critical issues, both in research and practice. On the one hand, the discipline is dismembered from the inside due to the rush for technological development and the increasing demand for new strategies to reduce energy consumption. On the other hand, the cross-pollination with Art and the dialogue with History have gradually decreased, thus causing the architects to lose their prominent cultural role in society. The article illustrates the relevance of the doctoral research project through its partial outcomes supported by personal interpretative drawings and images. The research starts by defining the fundamental values by which Architecture expresses itself, establishes the critical issue of its contemporary condition, and proposes the basis for a valid method for analyzing and designing. The case study examines the work of Giuseppe Perugini, a relatively unknown architect who devoted his entire life in fostering innovation in Architecture by reinterpreting its traditional parameters and defining their more appropriate posture based on the mutated human condition of his times. More specifically, his project of the 'Casa Albero' serves as the loose basis to demonstrate a material response to issues that are located on the level of abstraction and it could be defined as a best practice in terms of the depth of thought that an architect should have while thinking and designing an architecture. The architect is responsible for transmitting the values of Architecture into society that pass through the spatial experiences stored in memory.

1. Introduction

In the present era, Architecture addresses numerous critical issues that affect both educational and professional practice. On the one hand, schools are brought into play in terms of research and teaching activities, while on the other hand, architects themselves are urged to reflect on their role in society.

The discipline of architecture is nowadays facing an excessive fragmentation due to the call for responses to several emerging contemporary questions, largely concerning technological development and sustainability. This context is contributing to consolidate a design approach into separate compartments that can lead architects to focus only on specific areas, thus losing their ability to work in between things. That should be indeed the distinctive quality of an architect, a figure capable of grasping mutual relations and therefore to have a look broad enough for understanding how to solve the problems of a complex reality.

The doctoral research in architecture can not be, therefore, separated from these premises when it comes to its relevance. For a better understanding, it is interesting to compare with sciences that inquire about the human body in an operational perspective of health and safety.

In the medical field, the discipline has developed toward a hyper-specialization resulting in many subspecialties as parts of a single specialty. This fact has given rise to the need for a 'Medicine of the Whole Person', making space for a 'new generalism', which means a broader approach that frames health and disease in the context of the whole life of the pa-

tients¹.

Furthermore, there are several published articles and recent doctoral research theses which claim for a 'global medicine' that counteracts, for instance, the risk of prescribing wrong treatments because of ignoring an overall view on the story-life or reliability of a patient or even because of a total absence of human contact with her/him².

The primary source of this change in the treatment approach can be easily found in the lack of time due to the race to answer to technological demands of maximizing the yield in the shortest time possible.

Besides in Architecture, these topics had been already anticipated by Gustavo Giovannoni, the founder of the Faculty of Architecture in Rome who pioneered the 'architetto integrale', a figure capable to deal with the problems of both Art and Technique, in the wake of a tradition that runs from L.B. Alberti, Bramante, Sangallo and Fontana. These theme is of great relevance especially today.

It is not a coincidence that several conferences has been held in these last years around these topics and on Gustavo Giovannoni himself, thus stimulating a wider thought not only on the architectural profession but also on its education³. Consequently, this reality sets up a society in which the holistic figure is considered less important or at least less helpful than the specialized one because of its lesser suitability in answering a more than specific request. Broadening the discussion, a society is being developed that is aimed not to a long-term vision of the future but rather to an approach of immediate problem-solving, thus almost reversing the subordinate relationship between arts, science, and technology.

2. Presentation of the Doctoral Research

The doctoral research work intends to trace and theorize the contemporary condition of Architecture, by laying out its formative principles and its critical issues, and then proposing the basis for a method, valid both for research and practice, to read and design architectures aware of the foregoing premises.

The thesis is conducted based on the personal interpretation, with inferences, studies and drawings, of the not-well-known architect Giuseppe Perugini and his representative-built case studies, which are, as the materials in architecture, the most appropriate way to make a theory visible and intelligible. In this article, the selected architectural work is the 'Casa Albero', built in Fregene, Rome between 1968 and 1971 and designed by the architect with his wife Uga De Plaisant and his son Raynaldo Perugini. It is an exemplary architecture representing the built outcome of a theory that investigates the formative principles of Architecture and formalizes the human condition of conceiving and inhabiting space, in particular the domestic one. Considering that there is not an extensive bibliography on this architect or even access to his archive, the images presented here are the results of applying the method described in this article.

3. Restoring the Formative Principles in Architecture

The research starts from the assumption that Architecture expresses itself through two key concepts that are synthetic and unifying rather than analytic and disjunctive.

The first one is 'Space', which is the result of a human condition translated in a building act delimited in three dimensions:

Space is therefore the result of our human interpretation of cosmic infinity: a three-dimensional delimitation of it. Within this three-dimensionality constructed by us (almost a shelter of our finitude against the danger of dissolution in the infinite), not only the elementary physical processes take place which allow us to feel and "practically" translate spatiality (visual, tactile), but also our experience of human individuals rediscovers flavour, meaning and concreteness (Perugini, 1953)

The second one is 'Form', a concept broader than the first one, which represents the visible aspect of Architecture as the consequence and container of time and memory. A «unitary structure where the modification of a part modifies the unity and vice-versa».

«The examples of a more remote and more recent past are compared in terms of Form, beyond the human and economic, political and religious reasons to which they are mostly made to correspond [...] Only mutation makes Permanence visible, and the essence of a thing can be established through the changes it undergoes» (Grassi, 1967)

If we read an architectural work bearing in mind these two concepts mentioned above, it could unveil a deeper significance that returns a more comprehensive and original/correct interpretation of it⁴.

Furthermore, this method of investigating architectures

can enlighten values that require a more in-depth reflection still today and that have instead been disregarded in past times due to a short-sighted vision, thus providing progress in the state of the art. To modernize the research of an architect, who questioned himself around the issues of Architecture that are still valid today can sometimes be very useful to outline future trajectories for design.

For instance, even though the Roman architect and academic Giuseppe Perugini pioneered research and intended his life as a permanent opportunity for experimentation, he has been neglected and is still little known. Furthermore, his tendency not to advertise his works and the lack of attention from critics has generated many mistakes in interpreting his work. It is, therefore, essential to read his experience critically in order to bring out the quality of the research of those years, which represents a relevant cross-section of Italian architectural history.

The research aims to restore the values of fundamentals in Contemporary Architecture and stimulate reflections on some traditional parameters so that they find a more current place within the repertoire of contemporary design. For example, the domesticity and living, especially after what the world experienced during the pandemic.

4. Critical Issues

The research proposes a classification of the main problems that Architecture is facing today, as follows:

Poor dialogue with Art

Architecture has weakened its profitable dialogue with Art, running alone on its own track. More precisely, it has sought cross-pollination with disciplines more related to the technological development and containment of energy consumption.

Communion with Art has always been a fundamental assumption for Architecture to transfer values in society and make them effective; no need to recall the Staatliches Bauhaus. The discipline appears to be weary because of its dismembering from the inside, encouraging, therefore its 'financialization' and the possibility to be controlled for commercial purposes.

The doctoral thesis argues that Architecture should return to strengthen the dialogue with Art to reach the 'critical mass' to make its values operate in reality.

In physics, the critical mass is "the minimum amount of a given fissile material necessary to achieve a self-sustaining fission chain reaction under stated conditions"⁵.

It is so intended as a minimal quantitative threshold beyond which a qualitative change could be reached, an appropriate number of "adherents" of a new idea or innovation refers to a social system, capable of concretely impacting and achieving a real change.

Furthermore, it is no coincidence that in the study plan of the Faculty of Architecture in Rome, the course of History of Art has been recently deleted⁶.

In this case, understanding how Giuseppe Perugini conceived Architecture is extremely helpful because of his background as an artist in the early years of his life.

Even though several years later, he reinterpreted the Compositions probed by Piet Mondrian to understand how the

artistic intuitions of the Dutch painter could be transferred to Architecture in terms of convexity and concavity in Space, from the domesticity to the idea of a city.

Poor use of the figures of the History as materials for Design

[...] type expresses the permanence of its essential aspects and highlights the invariable characters of certain formal structures which act as fixed points in the evolution of architecture (Arís C. M., 1993)

Learning from History in Architecture might seem today a concept far from its operating incorporation into research and practice.

To do so effectively, it is essential to work for abstraction while we look at the great architecture of the past.

As Zevi wrote in his book “Saper vedere l’architettura” published in 1948, we should not describe Architecture as «a pure sculptural phenomenon», but instead we must be capable of understanding its spatiality.

The research works on this statement and tries to establish some rules for a method. First, we must state our definition of ‘spatiality’.

We will take Perugini as well, an architect through whom we can find many of the answers at the thesis statements. Spatiality can be intended as the human condition troubled by the introduction in the void of an ‘enveloping surface’ that establishes convex and concave situations in reality.

All these lead us to consider, for instance, that there is no interior or exterior space; it is only for academic and, therefore, teaching purposes.

Secondly, we have to apply our definition of spatiality to the great examples of history we would like to analyze and interpret through our personal vision, for instance, with the aid of re-drawings or models. An exemplary example is one of Luigi Moretti’s models of spatial interpretation published

in his “Spazio” review number 7 of 1952.

It is essential to gain the capability to work with History through radical abstraction in a systematic use for contemporary design, returning hopefully to work on the interrelation between sacred spaces that architects have in a certain way put aside for quite some time.

For instance, we can see a strong interrelation between the architectural void of Villa Adriana and the ‘enveloping surface’ of the Casa Albero. It represents an attempt to retrace the mental images of the memory, where material/matter is intended in its sculptural potential of a space enclosure, formed by defining a balance between finitude and infinite space. This conflict is evident in the plan and its external configuration.

Furthermore, the geometric scheme of the composition of Francesco Borromini’s Santa Maria dei Sette Dolori, based on the module of 1.80 metres, recalls the Casa Albero plan, which is based on the same module but also on its decomposition and composition following renewed geometrical ratios. As evidence of the abovementioned reasoning, it is worth mentioning that Perugini wrote two books on Borromini and surveyed many of his architectural works.

5. Discussions and Conclusions

The reasons described above convey a general framework of a broader contemplation on Architecture.

Today, Architecture has difficulties transferring values that represent and having sufficient vigor to be part of a choral voice that can effectively operate in contemporary society. To regain this effectiveness, it should be acting on two fronts. On the one hand, from the inside, by decreasing the variety of specialties and therefore reconstructing the integrity of a discipline unitary by statute; on the other hand, to the outside by strengthening the relationships with arts, culture, and history.

The architect shall reflect on the values that Architecture

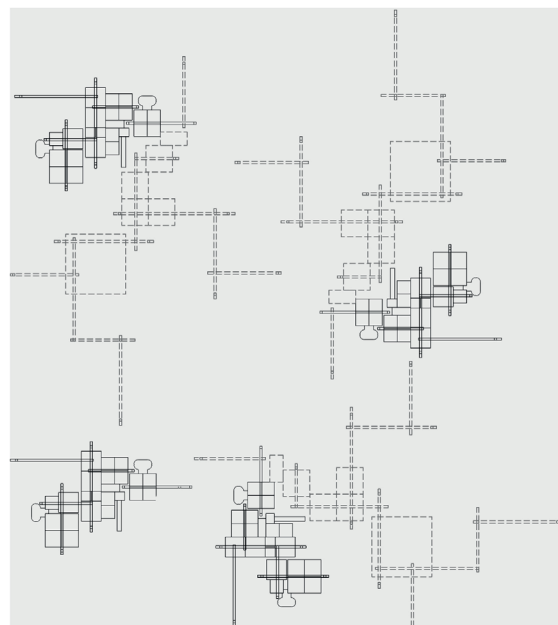
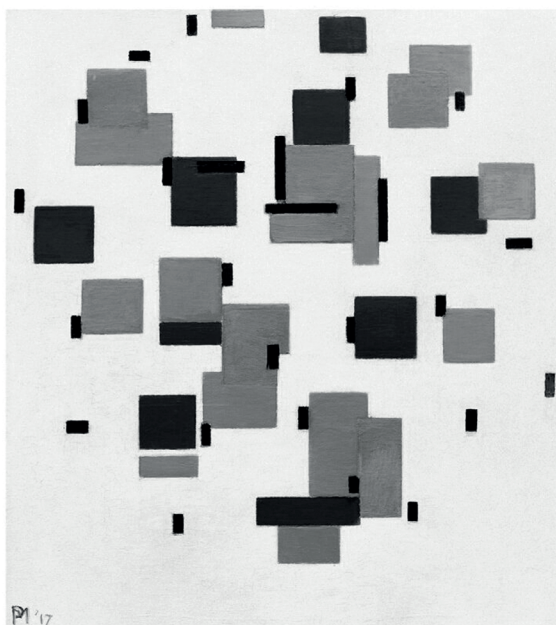


Figure 1: Comparison between the Composition in BLEU B. 1917 of Piet Mondrian and the free composition in space of the Casa Albero layout. Author elaboration)

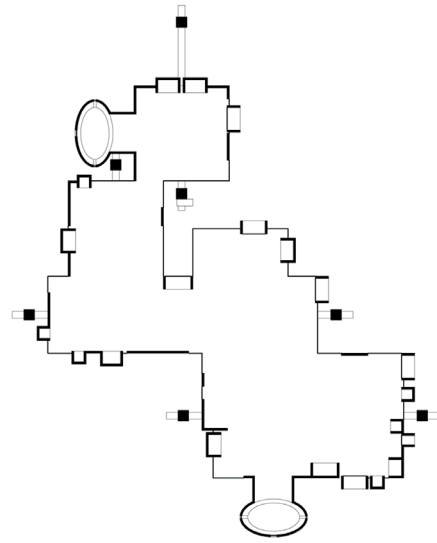
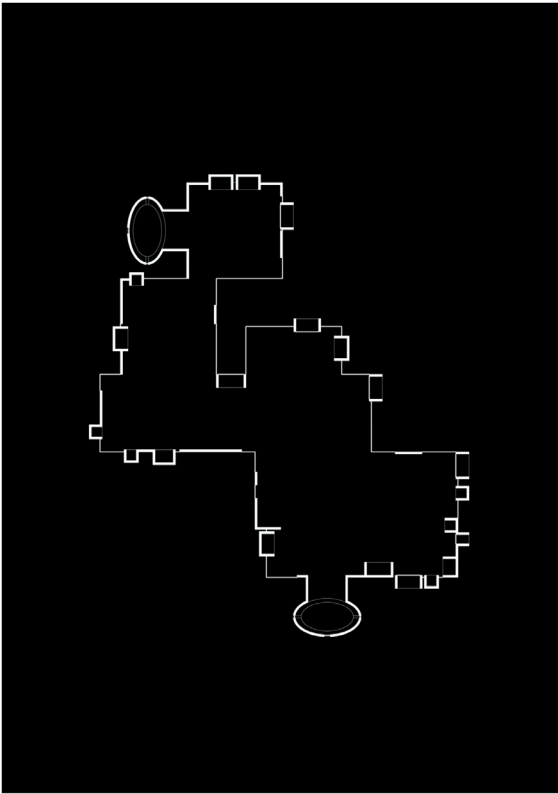


Figure 2: Abstraction of the architectural void. Author elaboration



Figure 3: Comparison between Villa Adriana and Casa Albero. Author elaboration

is concerned with and reflect on the assumption that there exists no ownership of the work but, instead, a responsibility to convey the values to society as the medium through which this passage takes place. In fact, permanence can live in Architecture and be transferred even through the experience of a single architect, who is accountable for what is being delivered to future generations.

So, the action to repurpose a Form that contains important values in itself is relevant to pass through all that has been and to have a vision of what the future will be, acting towards the future, passing through the present-past, widen the field of view by going back, proceeding horizontally with occasional vertical dips. The primary purpose of Architecture should be to give form to the human condition, which is why questioning how architecture interprets pain in the contemporary could be, for instance, future research development.⁷

Endnotes

1. For a better in-depth look see articles: <https://onlinelibrary.wiley.com/doi/10.1111/j.1365-2753.2009.01353.x>; <https://pubmed.ncbi.nlm.nih.gov/29130153/>
2. For a better in-depth look see: <https://studiolegaleramelli.it/2019/10/29/risponde-di-lesioni-colpose-il-medico-che-non-approfondisce-la-storia-clinica-della-paziente-e-somministra-un-farmaco-che-le-provoca-uno-shock-anafilattico/>
3. For a better in-depth look see: <https://www.youtube.com/watch?v=WwM1LRlqHjY>; <https://saad.unicam.it/it/notizie-ed-eventi/gustavo-giovanoni-e-l%E2%80%99architetto-integrale-atti-del-convegno-internazionale>; <https://www.tandfonline.com/doi/abs/10.1080/02665433.2022.2049354>
4. To show a concrete case, Casa Albero has been labelled of several different interpretations during the years, such as: brutalism; continuity from interior to exterior; innovative concept of structural system and envelope; module based composition; non-finishable space; mathematical series; volumetric light. Among all these interpretations, there is no dialogue or unifying point of view concerning the values of Space and Form.

5. see: <https://www.britannica.com/science/critical-mass>; <https://www.osti.gov/opennet/manhattan-project-history/Science/NuclearPhysics/critical-mass.html>

6. For a better in-depth look see: <https://corsidilaurea.uniroma1.it/corso/2023/29390/cds>

7. It could be interesting to conduct the research on the basis of what Byung-Chul Han writes about contemporary society in his recent book “The Palliative Society: Pain Today”.

Author

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He recently won the third prize as designer and group leader in the international competition on the Central Library of Humanities in Rome and the first prize in the architecture competition for building and restoring a school in Sardegna.

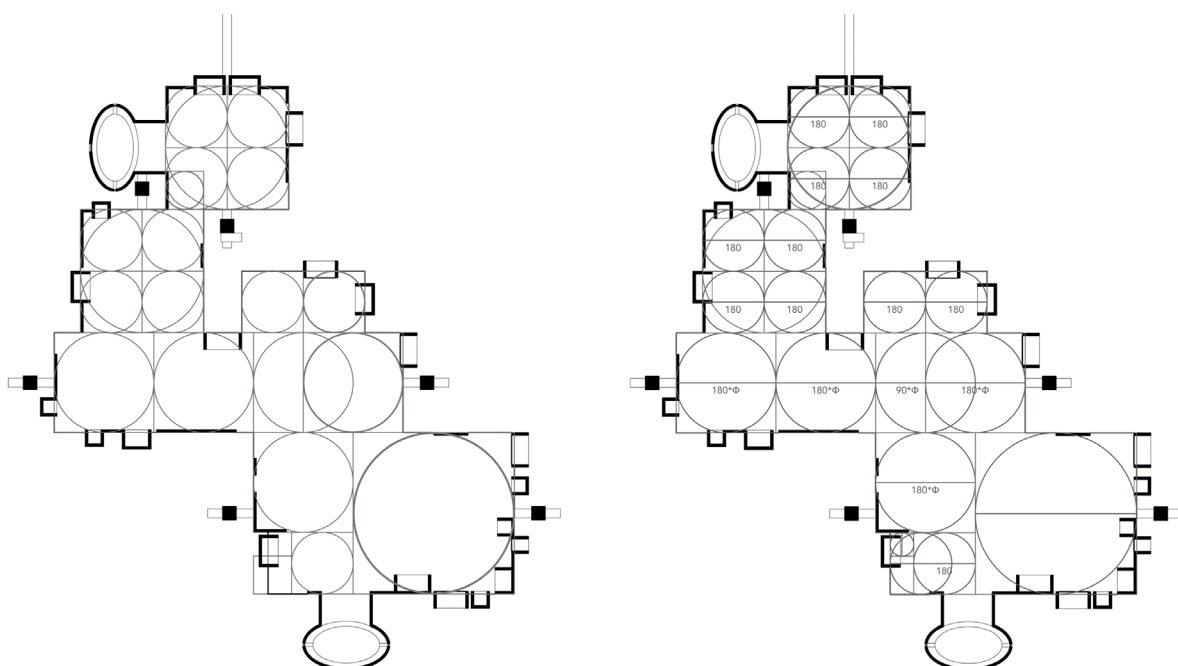


Figure 4: Geometric reconstruction of the plan of Casa Albero based on the module of Francesco Borromini Santa Maria dei Sette Dolori. Author elaboration)

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