Architecture as Infrastructure for Archaeology: A Design Strategy for Crapolla's Abbey in the Sorrento Peninsula Landscape

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The contribution aims at investigating the relationship between invisible archaeology, coastal landscapes and architectural design through the case of St. Peter's Abbey archaeological site, in the Fjord of Crapolla, Massa Lubrense, in the Sorrento Peninsula, that has been the subject of an interdisciplinary research held at the University of Naples Federico II. In these particular situations, architectural design works on an interpretative condition where the intersection between reciprocal learnings takes on great importance in order to define articulated design strategies for the valorization of the weaker ancient traces still present in the contemporary territory. The Crapolla's Abbey is an emblematic case, where the achieved results by different studies, from archaeological excavations to surveys, from studies on ancient materials and construction techniques to those on the spolia architecture, from landscape studies to geological ones, inevitably become the basis of architectural design, which has to be constantly updated, taking the connotations of an "open work" and becoming a sort of "building site of knowledge" in progress, where the new architecture becomes an "infrastructure" for archaeology.

Introduction

In the crossing of archaeology, landscape and architecture, places where archaeological findings are barely perceptible or completely invisible take on a particular characterization. A clear example is embodied by archaeological sites, located in isolated coastal landscapes and totally dipped into nature, which have not yet been excavated, or which have been excavated, covered and forgotten. Here, archaeological remains are so hardly distinguishable to express a silent and unintelligible condition into the landscape.

It is a very wide and problematic issue which requires very specific design answers. In these cases, the architectural design, developed before and during archaeological excavations, has necessarily to take an interdisciplinary approach, since it refers to something that is not visible or even to something forgotten, which gradually re-emerges. The project has to deal with an interpretative and evocative condition, which tries to explain weaker traces and where mutual intersections between archaeological excavation, knowledge of the site and open project, but also between nature and artifice, memory and amnesia, imagery

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and imagination represent some of the main tools that characterize design approaches in these specific situations.

This interesting topic has been faced and developed in an interdisciplinary research experience, led on the case of the archaeological site of the St. Peter's Abbey in the area of the Crapolla's Fjord, municipality of Massa Lubrense, in the Metropolitan city of Naples, located along the extreme offshoot of the Sorrento Peninsula that extends towards Capri (Figure 1).

The research work has investigated the relationship between coastal landscapes, invisible archaeology and architectural project, through a transdisciplinary interpretation that has crossed different studies and knowledge. From this interaction, design strategies and hypotheses have been developed, aimed at the conservation and at the enhancement of the site, intended as a unitary cultural heritage in the contemporary territory, but also aimed at the prevention, with the involvement of the local community, of the loss of the ancient traces still present here.

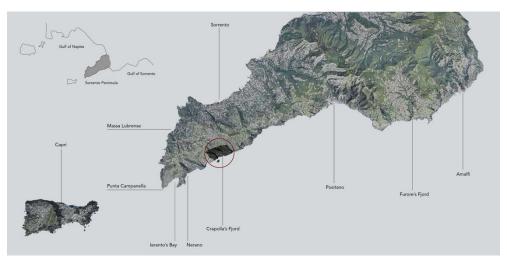


Figure 1. Crapolla's Fjord in the Sorrento Peninsula: Aerial View, 2017 Source: Drawing by Francesca Coppolino, 2017.

General research coordination: Valentina Russo; Research group for architectural design aspects: Pasquale Miano (group coordinator), Francesca Coppolino, Angela Spinelli.

^{1.} The research experience, here described, was conducted into the framework of the Applied Research Convention stipulated between the Department of Architecture DiARC of the University of Naples Federico II and the Municipality of Massa Lubrense (NA), set in July 2016, also in reference to the Agreement (2016-2019) between the Department itself, the Municipality and the Superintendence of Archaeology, Fine Arts and Landscape of the Metropolitan area of Naples.

Invisible Archaeology Between Amnesia and Imagery

With the expression "invisible archaeology" it is intended to focus the attention on archaeological remains that are so absorbed by nature that they blend in with the surrounding landscape, becoming "one thing" with it. In this case, the limits between artifice and nature are difficult to perceive and the topics of memory and amnesia, of imagery and imagination become important tools for the architectural project.

The case of the St. Peter's Abbey in Crapolla is an emblematic case on the topic of invisible archaeology in coastal landscapes, since it is an archaeological site, totally incorporated into the fjord landscape, which was mostly unknown before the systematic interdisciplinary research work led from 2008 by the Department of Architecture of Naples DiARC of the University of Naples Federico II.³ The religious complex has been the subject of many archaeological excavations, led during the long period of research, but also of historical, geological, landscape and design studies, which have helped to make some parts of the ancient mysterious fabric gradually understandable, even if, for other lost parts, the possibilities of interpretation are still open and wide.⁴

Only at a superficial look St. Peter's Abbey in Crapolla shows itself as a ruin similar to many others spread throughout the territory of European and Italian cities. Here, more than in other cases, the specific condition of a difficult site to reach predominates, since it is located in the intersection of impervious paths that cross and go up the Fjord (Figure 2). It is a set of routes on a territorial scale that, on the one hand, connects the site to the sea, in several directions, on the other, connects it to the hill and to the near widespread cores of the town. A set of routes that finds, in the area of the ancient complex, a natural viewpoint, with fascinating views of the coast so disruptive as to prompt to forget the architecture that is present there.

^{2.} By "invisible archaeology" it is meant the archaeological sites not yet subjected to excavations, or the sites excavated as a result of "inevitable" territorial transformations, studied, documented and then re-buried to guarantee their conservation. In: Lucina Caravaggi and Cinzia Morelli, Landscapes of invisible archaeology. The case of the Portuense district (Macerata: Quodlibet, 2014), 22.

^{3.} The involvement of the Department of Architecture DiARC in relation to the Crapolla site, can be traced back to 2008, the year from which many issues related to the knowledge of intangible values, physical-constructive characteristics of the various artifacts and the landscape were investigated (coordination: V. Russo). For a deep analysis of the results of the activities carried out between 2008 and 2013, see: Valentina Russo (Ed.), *Landscape as Architecture. Identity and conservation of Crapolla cultural site* (Firenze: Nardini, 2014).

^{4.} Field work, regarding archaeological excavation campaigns, has been coordinated by the archaeologist Giovanna Greco, Department of Humanities DSU, University of Naples "Federico II", both during the research activities conducted between 2008 and 2013 and for those done between 2016 and 2019. For a depth analysis of the excavation investigations and the interpretative hypotheses on the configuration and stratification of the religious complex, see: Giovanna Greco, "Peoples in the Sorrentine Peninsula, between myth and reality," in *Landscape as Architecture*. *Identity and conservation of Crapolla cultural site* (ed.) Valentina Russo (Firenze: Nardini editore, 2014), 211-221.



Figure 2. St. Peter's Abbey in Crapolla's Fjord: View at a Large Scale, 2017 Source: Photo by Marco Facchini, edited by Francesca Coppolino, 2017.

Ruins, which can be hardly traced, have a very close relationship with the natural landscape of the Crapolla's Fjord in which they are inserted: from the sea it is possible only to see a few remains, then reaching the top of the hill, from the small beach, it is possible to find a hidden place, located on the edge of the slope and totally open to the sea. In the current situation, here, although they are difficult to distinguish, there are the apse, the sacristy, the atrium, the wardrobe (*armarium*), the crypt, various stairs of the ancient St. Peter's Abbey that led to the paths towards the slope and, finally, it is possible to discover the Roman cisterns⁵ (Figure 3).

Today, the examined site appears as a set of limited fragile ruins, assimilated by nature, which recall what George Simmel wrote about the relationship between ruin and nature: "the ruin of a building shows that, in the disappearance and destruction of the work of art, other forces and other shapes have grown, those of nature, and thus, from what still lives in ruin of art and of nature, a new whole has

^{5.} In the Fjord to a first Roman occupation between the 1st century BC and the 1st century AD, the complex of cisterns connected to a water system that insists on the narrow strip of beach belongs. It was only in the early Middle Ages that the Abbey dedicated to St. Peter was built on the western side of the Fjord. In the Viceregal age, the tower of St. Peter was built on the eastern side of the inlet; finally, the so-called "monazeni", on the eastern side of the beach, used as a resting place for fishermen and for sheltering boats, complete the picture of the architectural presence within the Fjord. Cfr: Greco, "Peoples in the Sorrentine Peninsula, between myth and realit," 2014, 211-221.

come out". The peculiarity of the ruin, described by Simmel as a new element that comes from the combination of artifice and nature, is precisely what it is possible to find in the Crapolla's Fjord, where the identification of the artificial element is, in some cases, very complicated, almost impossible.



Figure 3. St. Peter's Abbey in Crapolla's Fjord: The Archaeological Remains, 2017

Source: Photo by Marco Facchini, edited by Francesca Coppolino, 2017.

In the case of the Abbey, nature has re-appropriated the building till the point that its remains are difficult to distinguish, since they now make an inseparable unity with it, shaping an overlapping of perceptions, temporalities and different images.

This particular condition could lead to believe that the balance reached between nature and artifice should not be changed, that there is nothing else to do to than preserve what remains today and appears to our observation. However, Simmel's own consideration on the continuous and never-ending changing of the condition of ruin, transformed over time into something "new", highlights how conservation itself is an active and complicated process, a process which presumes the change.⁷

The case of the ruins of the Abbey is a clear example of this condition, since the need for conservation has stimulated multiple issues in different directions and has promoted the identification, in addition to the topic of the relationship between

^{6.} Cfr. George Simmel, "La rovina," in *Rivista di Estetica* (ed.) Giovanni Cerchia, no. 8, (1981): 121. [original edition: George Simmel, "Die Ruine," in *Philosophische Kultur* (Leipzig: Gesammelte Essays, 1911), 125-133].

^{7.} For more information, see: Gianluigi De Martino, *Rovine e ruderi: conservazione e progetto* (Roma: Gangemi Editore, 2017).

nature and artifice, of other two design topics, that are extremely sensitive and helpful in the context of the contemporary project for the places of archaeology.

A first aspect concerns the relationship between memory and amnesia, two concepts that might seem opposite and contrasting, but which, on the contrary, often coexist in the case of ruins, giving rise to interesting design considerations.

The site of the medieval St. Peter's Abbey of Crapolla has been characterized, over time, by a long process of abandonment, which, however, was full of "returns" and active memories. In fact, the religious attractiveness of the ancient site, of great influence over the centuries, and the local identity have never completely failed.

Although it is difficult to see, the ruins of the ancient archaeological artefact are strongly stratified ruins. Through a careful study of the archaeological remains it has been possible to identify traces of different historical and temporal phases, that have condensed within the site, bearing in mind that first information on the Abbey, reported in documentary sources, date back to 1111, although its existence seems very likely already in previous centuries.⁹

In this regard, the observation on-site has demonstrated how, already in the phase of construction of the Abbey dedicated to St. Peter's, *spolia* material was widely reused, defining an accumulation of layers and an intersection of fragments into landscape (Figure 4).

Another example of the overlapping of architectures over time in the same site is the post-war chapel, built in an intermediate position respect to the ancient atrium. The addition of this element involved a reversal in the orientation of the liturgical functions, originally turned towards east and, since 1949, to the west. In fact, to ensure the access to the chapel, near the apses a small entrance was created, along the path that surrounds the church. The uninterrupted use of the chapel over time by the local community constitutes a very significant aspect in relation to the topic of the continuity of worship and of memory, recalling, as Salvatore Settis wrote, that: "memory of what we were, ruins tell us not so much what we are, but what we could be. They are for the community what childhood memories are for the individual". The citizens themselves, but also inhabitants of neighboring municipalities, have never stopped to recognize the religious site as an

^{8.} A centuries-old absence of maintenance, together with direct exposure to meteoric agents have now led to an advanced decay of the Abbey of Crapolla. What is still preserved is threatened in a widespread way by the presence of weed vegetation and by the absence of preventive measures of decay.

^{9.} For an analysis of the historiographical sources and of the hypotheses regarding the layout and transformations of the St. Peter's Abbey in Crapolla over the centuries, see: Valentina Russo, "On the edge of a precipice bathed by the sea: a knowledge path for the conservation of the Abbey of St. Peter's in Crapolla", *Arkos*, special number, (July 2010): 70-81; Valentina Russo, "Memory and conservation of fragile ruins. The Abbey of St. Peter in Crapolla", in *Landscape as Architecture*, ed. Russo, 95.

^{10.} cfr. Amedeo Maiuri, *Passeggiate sorrentine* (ed.) B. Iezzi (Sorrento: Franco Di Mauro, 1949), 91-92.

^{11. &}quot;memoria di quel che fummo, le rovine ci dicono non tanto quello che siamo, ma quello che potremmo essere. Sono per la collettività quello che per l'individuo sono le memorie d'infanzia". Salvatore Settis, "Rovine. I simboli della nostra civiltà che rischiano di diventare macerie," *La Repubblica*, Nov (2010).

important place of memory in the territory of the Sorrento Peninsula. The involvement of the local community in the research process has in fact constituted an important aspect for the definition of the design hypotheses of conservation, reuse and transformation of the area of the St. Peter's Abbey.

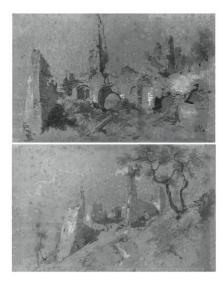




Figure 4. Teodoro Duclère, Drawings of Crapolla's Ruins, 1850; Roberto Pane, Photos of the St. Peter's Abbey Ruins, 1955 Source: Museo Correale, Sorrento, Tav. CXLV-CXLVI, 1850; Archive Roberto Pane, Crapolla,

1955.

Alongside the memory, intended as a "storage of collective identity", ¹² in the case of the Crapolla site, the concept of "amnesia" has even more value, intended, instead, as a manifestation of absence. The term "amnesia" means the double negative of "memory", which involves an absence of memory, something that is not remembered or that has escaped from memories.

"Amnesia, already the subject of studies by Sigmund Freud (Freud 1901), is grafted into the articulated system of memory as an anomaly and, degenerating, can arrive to undermine the 'internal coherence of life'". Therefore, amnesia can be understood as an interruption of memory, a suspension of knowledge, a temporal stop, a lack, a void, placing itself as a possible interpretative tool for the project. Regardless of its duration, it leads to the making of a gap within a sequence of phases and to the removal from reality of a fragment of identity.

When the amnesia concerns the archaeological heritage, it highlights a significant distance between the evolution times of the landscape and the rhythm of the metamorphosis of the ruins.¹⁴ If not considered by a design vision capable

^{12. &}quot;deposito di identità collettiva". Francesco Venezia, *Che cosa è l'architettura. Lezioni, conferenze, un intervento* (Milano: Mondadori Electa, 2011), 92.

^{13.} cfr. Sara Marini, "Amnesia," in *Recycled Theory: Dizionario illustrato* (ed.) Sara Marini and Giovanni Corbellini (Macerata: Quodlibet, 2016), 33-41.

^{14.} cfr. Marcello Barbanera (Ed.) *Relitti riletti. Metamorfosi delle rovine e identità culturale* (Torino: Bollati Boringhieri, 2009).

of combining all the temporal variables that characterize stratified landscapes, this distance can degenerate into a progressive process of abandonment.

In the case of the archaeological site of Crapolla, amnesia displays itself respect to what is hidden or has not yet been discovered, to what is absent and presumed, but not certain. It happens in relation to some historical phases and some elements of the Abbey of which fascinating legends are narrated, but of which there is no precise evidence and documentation. An example is the case of the ancient tower, which is said to have been erected in the north-west area of the archaeological site, but of which only a faint memory remains, an absence to be verified.

In this direction, of great importance are the design actions built around the concept of "absence", which have the main aim at transforming absence into presence, placing the interaction between the historiographic function of archaeology and the design mechanisms linked to the topic of imagery and imagination: "the important thing is not what it is seen but what the imagination reconstructs with the mind's eye through a process of transfer which refers to something else. This process is, at the same time, allusion and illusion". ¹⁵

A second relevant aspect, which the condition of the Crapolla's Abbey allows to highlight, is that of the imagination, which precedes the project. The very close relationship with the natural landscape of the Crapolla's Fjord, of which the Abbey is part, has defined an overlap of multiple and different images and imaginaries, which constitute a precious material for the architectural design.

When, from the sea, it is reached the top of the hill where few remains lie, it is found an unexpected, hidden, surprising place, a really "imaginative place", totally absorbed into the surrounding landscape. This same perception of surprise had characterized the photographic images of the early twentieth century taken on the site by Riccardo Filangieri of Candida¹⁶ or those taken by Roberto Pane, who had made the site an original and ideal film set for some short films shot there¹⁷ (Figure 5).

However, it is only by a vision from the top that it is possible to have an overall view of the church and the Abbey and then try to imagine a sort of general plant and individual parts. Only in this way is it possible to see the traces that evoke the ancient system.

It is of great importance to keep in mind the imaginative force produced by the traces, the alignments, the rhythmic sequences of the ruins, eloquent fragments of lost architecture and for this reason capable of generating new figures and new shapes. ¹⁸ In this condition, the invisible archaeology, dipped in nature, can be imagined as a real "landscape capacitors" or even as a "mnemonic landscape". ²⁰

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^{15.} Caravaggi and Morelli, Paesaggi dell'archeologia invisibile, 13.

^{16.} cfr. Riccardo Filangieri di Candida, *Sorrento e la sua penisola* (Bergamo: Istituto Italiano d'Arti Grafiche, 1917).

^{17.} cfr. Archive Roberto Pane, Crapolla, 1955; cfr. Archive Storico Luce, Penisola sorrentina, 1950

^{18.} cfr. Tessa Matteini, *Paesaggi del tempo. Documenti archeologici e rovine artificiali nel disegno di giardini e paesaggi* (Firenze: Alinea, 2009).

^{19.} Caravaggi and Morelli, Paesaggi dell'archeologia invisibile, 24.



Figure 5. *Roberto Pane, Short Films, 1950 Source:* Archive Storico Luce, Penisola sorrentina, 1950.

Mnemonics, also known as the "art of space", is a so-called "topical" strategy, because it consists in preserving all the things that must be remembered in the *topoi* or *loci*, a sort of familiar places: "this allows to attribute a precise image to everything, which, in this case, is called *imago agens*, that is an image that acts to recall the object that must be brought back to memory. This second phase is the result of imagination, or *phantasia*. This art therefore implies a mnemonic landscape, in which everything that must be remembered present a precise location".²¹

In this direction and in order to focus attention on the crossing of memory and imagination, it is possible to refer to Juhani Pallasmaa who, starting from Gaston Bachelard's²² distinction between "formal imagination" and "material imagination", argues that "images that arise from matter show experiences, memories, associations and emotions that are deeper and more touching than those evoked by the

^{20.} In this direction, it can be remembered the Greek lyric poet Simonide di Cheo (556 - 468 BC), considered the founder of mnemonics techniques, who experienced that memory operates visually, through logical and ordered sequences of images and that their precise arrangement is an indispensable condition to guarantee a certain remembrance. Cfr. Maria Clara Ruggieri Tricoli and Maria Desirée Vacirca, *L'idea di museo. Archetipi della comunicazione museale nel mondo antico* (Milano: Lybra Immagine, 1998).

^{21.} cfr. Santina Di Salvo, Luce e colori sulle rovine. Strategie museografiche per la comunicazione dell'archeologia (Roma: Aracne, 2012), 31.

^{22.} Gaston Bachelard, *The poetic of space* (Bari: Dedalo, 2011).

shape". ²³ So, he speaks of fragment, collage and discontinuity in the architectural imagery, underlining the need to operate towards an "open, unfinished reality, associations of ideas, memories, the concept of collage and assemblage". ²⁴ In another circumstance he stresses again that: "the restoration of Castelvecchio (1956-64) by Carlo Scarpa in Verona, the transformation by Sverre Fehn of the ruins of the Archbishop's Museum in Hemar (1967-1979) and the recent David Chipperfield's reconstruction of the destroyed Neues Museum in Berlin (2009) are among the most extraordinary examples of architectural collages that emerged through a sensitive and deep architectural design". ²⁵

Pallasmaa's considerations invite to think about the importance of the "imagery" and "material imagination" and on how narrative techniques and cinematographic *montage* can be able to define an archaeological density of the imagery and a hybrid narrativity, through the juxtaposition of fragmented images deriving from non-linear origins, providing interesting design possibilities.

Starting from these considerations, it is possible to understand how the archaeological evidence, even if invisible, can find through the architectural design a new creative capacity and new constructive possibilities for the contemporary space. This can happen through the reinterpretation of traces, locations, dimensions or the definition of new spatial associations, in relation to different time periods and to the changes of the environmental contexts, "avoiding the interpretative accentuation of the 'shape' (stylistically understood) of the single objects".

In these cases, the enhancement of the site is pursued through the insertion of new elements that give a new interpretation of the landscape traces belonging to different temporalities of the findings. These signs, these elements cannot be interpreted in an arbitrary way, but, as Andrea Carandini underlines in a more general reflection: "the new elements could arise from the hidden, the obvious from the secret and the transformation of the existing would not be based on a quick and intuitive synthesis, but on solid knowledge bases, where detail is considered as an indication of a system to be reinvented".²⁷

The intent of an architectural approach, conceived in this way, referred to the sensitive topic of invisible archaeology, that the case of Crapolla's Abbey highlights, cannot be that to affirm its own supremacy over the past, but rather to strengthen the unity of nature and artifice and to narrate the continuous sequences of a possible uninterrupted tale of memories and amnesias, since, as Cesare Pavese wrote, "amazement is made of memory rather than novelty". 28

It is possible to mention the intervention by Toni Gironès Saderra for the Roman Theater in Tarragona (2018), ²⁹ where the construction of a structure in

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^{23.} Juhani Pallasmaa, *Frammenti. Collage e discontinuità nell'immaginario architettonico* (Pordenone: Giavedoni, 2012), 50.

^{24.} Ibidem.

^{25.} Pallasmaa, Frammenti, 50-51.

^{26.} Caravaggi and Morelli, Paesaggi dell'archeologia invisibile, 25.

^{27.} cfr. Andrea Carandini, La forza del contesto (Bari-Roma: Editori Laterza, 2017).

^{28.} Cesare Pavese, Il mestiere di vivere: diario 1935-1950, (Torino: Einaudi, 2000), 241.

^{29.} cfr. Toni Gironès Saderra, "Restituzione del Teatro Romano di Tarragona, Spagna," *Casabella*, no. 898 (2019): 44-51.

corrugated steel rods defines the generators lines that raised in volume part of the remains of the theater. "Like a cloud of flocks and by reversing what is static (the observer) and what is in movement (the choreography of birds in motion) the tangential visions of successive alignments build the shadow of the old theater starting from the experience of visitors as new contemporary spectators". The intervention highlights a very important aspect in relation to the design logic experienced for the Crapolla's site, that is the experiential narrative of the archaeological site which, starting from an evocative-imaginative mechanism and through the insertion of light and changeable elements, tries to evoke the void that the ruin shows, making some parts of the ancient complex legible and visible and defining spatial episodes (Figure 6).



Figure 6. Roman Theater in Tarragona, Toni Gironès Saderra, 2018 Source: Casabella, n. 898, 2019, p. 49.

In this way it is possible to imagine new or ancient futures and to provide new meaning to the ruins of the past, through an architectural project intended as a building site of knowledge in progress, as the result of mutual intersections between different disciplines, becoming a kind of a scaffolding for archaeology into the landscape.

A New Scaffolding in the Landscape

Starting from the previous considerations, the design approach for the enhancement of the archaeological site of Crapolla, proposed in the research work, took into consideration a multiplicity of aspects: firstly, the incompleteness of the knowledge relating to the site, especially the archaeological one, and the value of

^{30.} Ibidem.

the social identity, recognized by the local community, that the religious place has maintained over time; then, the "non-recognizability" of the ruins of the Abbey in the current condition in which the dominance of the strong value of the multiple perceptions of the landscape is felt. Finally, the aspect referred to the possibility of using a mechanism of imagination that could, on the one hand, tell the space in ruins, on the other, direct it towards new possibilities.

In this situation, where there is the necessity of waiting for knowledge deriving from different studies in progress, becomes important to consider very different ideas, but also, at the same time, to be able to refer to this articulated framework some precise design actions. In particular, the need to better understand the site, in the waiting of the archaeological excavations or during the first archaeological excavations in progress and, at the same time, the continuous dialogue, during the research, with the local community, constituted two important aspects that influenced the design process.

In the research work, these very problematic assumptions have not been taken into consideration in an abstract way. They have been faced as a reply to existing needs, which have made the conservation and the re-use of the site very difficult and in this main aspect lies the originality of the whole design operation. These real needs mainly concerned the issues related to the securing of the site; the protection of some elements, such as the found frescoes; the accessibility on a large scale, but also the necessity to introduce public facilities, in order to improve knowledge and usability of the site. All these needs are intertwined with the demand to continue the investigations on site with further researches, especially, as said, through the archaeological excavations in progress (Figure 7).

Giving answers to these needs has meant addressing the topic of the contemporary intervention in the ancient matter, defining a close dialogue with the fragile ruins and with the landscape. A dialogue that has imposed, in compliance with the principles of reversibility and recognition of the new intervention, a careful work of correlation and comparison between the new elements to be inserted and the ruins of the Abbey.

In this direction, the parallel with the project made by Álvaro Siza Vieira and Roberto Collovà for the valorization of Piazza Alicia and the reconstruction of the Salemi's Church (1984-1997)³¹ can be very useful for illustrating the design logic that has been introduced in the architectural hypothesis proposed for Crapolla. In Salemi the condition of ruin is caused by the earthquake, in Crapolla, instead, by time and by the lack of physically recognizable elements. The intervention of Siza and Collovà had the goal, through the inclusion of a few essential elements, to reconnect the relationship between the fragmented parts and, at the same time, to

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^{31.} The reconstruction project for Salemi was concieved by Álvaro Siza Vieria and Roberto Collovà, starting from the studies for the Belice Design Laboratory with the collaboration of the Technical Department of Culture of Mazzara del Vallo. The executive project, commissioned by the Curia of Mazzara del Vallo, concerns the Church, but also outlines interesting indications for possible future interventions in the historic center. See: Rosa Tamborrino, "Invisible thresholds: the reconstruction project of the Mother Church in Salemi di Collovà and Siza Vieira", *Restauro e città* (1989): 82-93.

achieve a continuity between old and new architecture. This action has given unity and coherence to the general intervention.

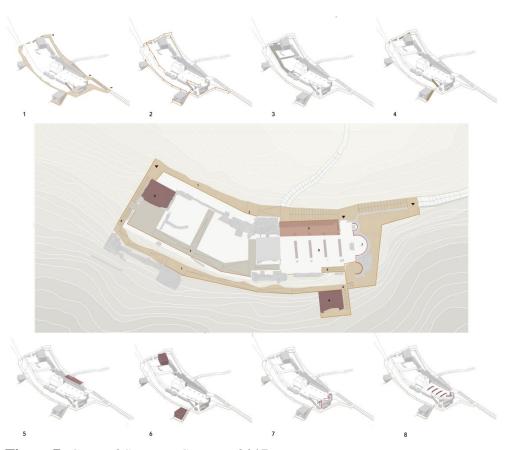


Figure 7. General Strategy Concept, 2017

Source: Drawings done by the research group for architectural design aspects: Pasquale Miano (coordinator), Francesca Coppolino, Angela Spinelli, 2017.

It seems possible to paraphrase Renato Bocchi's formula of "architecture as a framework to experience landscape", speaking of "architecture as a framework to experience archaeology". Designing landscape means designing a complex spatial system, subject to constant change, and also to a continuous variability of perceptions according to the movement of those who experience the landscape.

Bocchi's reflection, in this design research, allows to emphasize how there is no contrast, but a combination between the shapes of architecture and those of archaeology: architecture is a scaffolding, a framework with its own specific structure designed to read, interpret and narrate the archaeology, but not to compromise its shapes.³³

Starting from the ruin-nature unity that has been achieved in the Crapolla's archaeological site, the aim of the proposed architectural hypothesis was to realize

^{32.} Renato Bocchi, "Le strutture narrative e il progetto di paesaggio," in *Il Parco dell'Ariosto e del Boiardo. Progetti di luoghi come esercizi di fantasia*, ed. Carlo Olmi (Macerata: Quodlibet, 2010), 41.

^{33.} Ibid, 60.

a new unity in which the new inserted elements define, above all, a condition of internal coherence, which, at the same time, is able not to alter, but rather to strengthen, the ruin-nature unity from which it is started.

Realizing a condition of coherence between the new grafted elements, for examples, a walkway, a connection path between different heights, a small roof, a light railing, small volumes, meant interpreting the different elements as a unitary plot of interconnected elements, through which establish relationships with the ancient traces, without prevailing it (Figure 8).



Figure 8. Project Proposal: General Plan and Section, 2017 Source: Drawings done by the research group for architectural design aspects: Pasquale Miano (coordinator), Francesca Coppolino, Angela Spinelli, 2017.

The work of the historical reconstruction of previous strata and layers is intersected with the securing project of the site, by engaging design steps that move between the invisible and the visible and that are inspired by existing signs, starting from which a new contemporary element, consistent as a whole, is grafted.

So, in the design explorations related to the area of the Abbey of Crapolla, was tried to act through the "light grafting into the landscape" of a few and precise elements necessary to protect the site and to ensure adequate use.

A "wrapping" of the site of the Abbey was proposed, which could enhance its consolidated role as a crossroads of paths coming from the sea and the hills, improving its accessibility.

Along the two parallel paths that could take place above and below the Abbey, with exceptional views of the landscape, the existing entrance at the altar can be maintained and two new entrances can be inserted: a first access which, by arriving behind the apses of the church, allow to reach directly the roman crypt and then go up towards the church; a second access, instead, provided near the cistern located to the north-west, could allow to enter the complex from the cloister side.

Basically, the limited new connections realized by these paths, largely already traced, could improve the usability of the site, but also could allow to protect the site, through the introduction of railings along the two paths and the reuse of the pre-existing staircases of access to the crypt and to the Abbey spaces.

Overall, it can be possible, in compliance with the inevitable problematics of the site, to safely access the interior spaces of the Abbey and the church from different levels. In particular, in the interior spaces it could be possible to define a unitary connection on several levels able to connect the church with the Abbey area, the crypt and the cistern.

The path through the ruins of the Abbey could find in the so-called cistern, a first information point in which to place didactic and informative supports aimed at illustrating the historical events and architectural features of the religious complex.

The exploration of the parts down of the Abbey, towards the sea, will allow to define new directions for the visit connecting the floor of the cloister and the lower levels. The crossing of the mentioned court will allow to explore the ruins corresponding to the interior and exterior spaces of the Abbey.

A further vertical connection could still be necessary to connect the floor of the church with the basement placed below the transept and between this one and the low cistern, now almost inaccessible. Finally, the basement may constitute the suitable place for the insertion of exhibition elements and dissemination supports about the Abbey complex and the Crapolla site.

A very close relationship can be implemented between the safety railings of the upper path and a roof to protect the frescoes, found along the perimeter walls of the church.

The internal ramp leading to the Abbey spaces could be conceived in close interaction with the progress of the archaeological excavations, for which a modular floating floor can be considered which, depending on the excavation areas, will be moved to the best appropriate position.

At this point, but without any discontinuity with the described proposal for accessibility and securing, some design considerations can be advanced relating to the readability and use of spaces.

The substantial change introduced with the construction of the small post-war chapel led to the creation of a very particular religious space, with the altar and the apses opposed to the chapel, generating a contrast between ancient and contemporary religious rites, which is configured as a peculiarity to preserve.

It appeared interesting to suggest some architectural solutions able of helping to read the layout of the ancient church, such as, for example, the anastylosis of the ancient columns based on the procedures of the restoration discipline, but also the definition of a new "scene", a sort of light wall of background, in correspondence of the apses, which supports their identification (Figure 9). This intervention can also be thought of in continuity with the railings and the roof, mentioned earlier, so once again the design action primarily answers to the goal of securing and protecting the area.

On the other hand, it is also possible, by modifying its height and material consistency, to conceive the "scene" as a screen for projections or as a background for small concerts, also introducing a secular use of the ancient religious space.



Figure 9. Light Grafting into Landscape: Longitudinal Section, 2017 Source: Drawings done by the research group for architectural design aspects: Pasquale Miano (coordinator), Francesca Coppolino, Angela Spinelli, 2017.

It could be possible to create a light exhibition set-up to complete the requirements for accessibility and safety, also providing for the insertion of linear steel elements in the church, which can be used as seats for both religious ceremonies and for concerts. Also, the cisterns could be used as exhibition spaces, through the insertion of a few removable and recognizable elements.

On a larger scale, the issue of visitor facilities must finally be taken into consideration. It is a relevant issue, which cannot be addressed only by considering the fragile site of the Abbey, but referring to the entire scale of the Fjord.

Designing the unity of the architectural elements and, at the same time, their total recognition and reversibility is a very sensitive goal, which requires deep studies and considerations that can only be achieved in the detailed phases of the project. From this perspective, the final choice of materials to be used will be the outcome of a long and articulated process, in which the various alternatives can also be evaluated through field trials.

In the research phase, aware that several alternatives will usefully be considered, with the development of excavations and knowledge, the introduction of some materials was proposed: the beaten earth for the paths that surround the site, providing joint treatments for safety, with the introduction of stone curbs; bronzed steel for the railings, roofs, ramps and stairs, in order to obtain spaces which reveal their difference, without contrasting with the context; steel for the construction of the internal floating carpet and the new connection path along the edge of the apses with the definition of a grid and, where necessary, of a slab (Figure 10).

Of course, each hypothesis has to be measured in relation to the findings of the ongoing archaeological exavation campaigns, and always taking into consideration the necessity to choose reversible and flexible systems according to the changing requirements of the archaeological excavation site.





Figure 10. Light Grafting into Landscape: Vision of the "Scene" Between the Absent Apses and Vision of the Flexible Platform between Archaeological Excavations, 2017

Source: Drawings done by the research group for architectural design aspects: Pasquale Miano (coordinator), Francesca Coppolino, Angela Spinelli, 2017.

In this regard, it is important to underline that, in the design solutions, particular attention should be paid to the requirement of modularity, to facilitate working aspects, such as transport, assembly and disassembly, reusability; but also, to the requirement of maintainability and of easy inspection and, above all, to the requirement of flexibility and reversibility of the new contemporary "layer" to be introduced. It should be a non-definitive layer, open to new possible changes deriving from the evolution of research and new archaeological findings, which may also significantly revise the project.

The research work on the Abbey of Crapolla could further continue, by deepening the field of knowledge relating to the archaeological site in the northeastern part of the complex, not yet examined, but also relating to the many archaeological paths to be defined towards the coast and the center of the town.

These last considerations are really important since they raise the issue of the adaptation the architectural configuration to the changing reality of archaeological sites and to the evolutionary process of scientific research.

As Marguerite Yourcenar, speaking of the "time, great sculptor", remembers: "from the day the sculpture is finished, in a certain way, its life begins, a second phase, over the centuries [...] an alternation of adoration, admiration, love, contempt or indifference, by successive degrees of erosion and wear, will gradually bring it back to the state of shapeless material from which the sculptor had stolen it [...] Some of these modifications are sublime. To the beauty, desired by a human brain, by an era, by a particular form of society, we add an involuntary beauty, associated with the events of history, due to the effects of natural causes and time. Broken sculptures so well that from the ruin a new work is born, perfect in its own segmentation". ³⁴

^{34.} cfr. Marguerite Yourcenar, Il tempo, grande scultore (Torino: Einaudi, 1985).

Marguerite Yourcenar's "time great sculptor" acts on the physical consistency of architectures, modifying the "matter of its shape: matter of uncertainty" and defining an involuntary beauty. This matter, initially conceived as a construction of solidity, synonymous of eternity and duration, is now found as malleable, undergoing a metamorphosis, in which with the term "metamorphosis" is meant to reveal the constantly open and developing aspect of the archaeological ruin.

Conclusions: The Project as an Open Work

The St. Peter's Abbey in Crapolla has constituted a real interdisciplinary research field, where knowledge has represented the common goal and where elements and considerations that have originated from the different contributions - from archaeological excavations to surveys, from studies on construction techniques to those on *spolia* architecture, from landscape studies to geological ones - have become basic aspects for the project work. In this case, it is necessary that the architectural design has to be constantly updated and integrated, assuming the connotations of an open project in all the phases, from the initial setting up to the daily work on site.

In particular, two aspects played a significant role in the definition of the design approach: the development of the archaeological excavations during the design process and the involvement of the local community. The archaeological excavations have constituted the main tool of knowledge for the site and, therefore, the central element around which the various design hypotheses taken into consideration turn on, which have been modified, integrated and updated with the changing situation due to the excavations in progress. The further aspect that influenced the design process concerned the involvement of the local community in the definition of the strategy and of the architectural interventions for the valorization of the site. In fact, is has been developed a continuous exchange of ideas and a rich dialogue with local community that took place at various moments of the research, through meetings, conferences and collective site inspections.

Starting from these considerations, the proposed design strategy for the fragile heritage of the arcaeological site of Crapolla suggests and defines a unitary, layered architectural system, whose "image" shows all its autonomy and recognizability, without marking formal mimesis respect to the ancient material. A "light" architectural graft that tries to blend itself into the landscape in a harmonious way, without renouncing to act as a "new architectural sign in the stratification process". An articulated and reversible architectural system, almost ephemeral, which can change itself with the changing archaeological excavation

^{35.} cfr. Paul Valery, Eupalino o dell'architettura (Lanciano: Barabba, 1932).

^{36.} From the Greek *metamórphōsis*, which derives from *metamorphôun* transform, composed of *metá*, which indicates transformation, and *morphē*, form.

^{37.} Franco Purini, "Il nuovo e tre forme dell'antico," in *La modernità delle rovine. Temi e figure dell'architettura contemporanea* (ed.) Stefano Bigiotti and Enrica Corvino (Roma: Prospettive Edizioni, 2015), 80.

campaigns and with the storytelling site museum requirements, taking the connotation of a "permanent transitory device", a device in continuous evolution, a sort of a scaffolding of archaeology into the landscape.

Finally, the archaeological site of the St. Peter's Abbey in the Fjord of Crapolla is configured as a study case able of enhancing the cognitive character of the architectural project, not only for its intrinsic specificity, but also for the ability to correlate and synthesize research results from different disciplines.

Through the illustrated design strategy, it has been possible to highlight the importance of the process in the architectural project that operates in archaeological contexts: a process linked to the dynamics of excavation, to the progress of knowledge, to the interlocution with the community and the municipality and to the progressive interactions between different knowledge. All these variables are essential elements in trying to define an architectural design aimed at enhancing these particular and hidden sites, but which is open to possible future discoveries into the archaeological landscape, configuring itself as a "building site of knowledge" in progress.

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Bibliography

- Bachelard, G. La poetica dello spazio. (The poetics of space.) Bari: Dedalo, 2011.
- Barbanera, M. (Ed.) *Relitti riletti. Metamorfosi delle rovine e identità culturale*. (Wrecks reread. Metamorphosis of ruins and cultural identity.) Torino: Bollati Boringhieri, 2009.
- Bocchi, R. "Le strutture narrative e il progetto di paesaggio." (Narrative structures and landscape design.) In *Il Parco dell'Ariosto e del Boiardo. Progetti di luoghi come esercizi di fantasia*, edited by C. Olmi, 41-50. Macerata: Quodlibet, 2010.
- Carandini, A. *La forza del contesto*. (The strength of context.) Bari-Roma: Editori Laterza, 2017.
- Caravaggi L., and C. Morelli. *Paesaggi dell'archeologia invisibile. Il caso del distretto Portuense*. (Landscapes of invisible archaeology. The case of the Portuense district.) Macerata: Quodlibet, 2014.
- Collovà, R. "Piazza Alicia e Chiesa Madre a Salemi." (Alicia Square and Mother Church in Salemi.) *Frammenti, Firenze Architettura*, no. 1 (2006): 58-65.
- De Martino, G. *Rovine e ruderi: conservazione e progetto*. (Ruins: conservation and project.) Roma: Gangemi Editore, 2017.
- Di Salvo, S. *Luce e colori sulle rovine. Strategie museografiche per la comunicazione dell'archeologia.* (Light and colors on the ruins. Museographic strategies for communicating archaeology.) Roma: Aracne, 2012.

- Filangieri di Candida, R. *Sorrento e la sua penisola*. (Sorrento and its peninsula.) Bergamo: Istituto Italiano d'Arti Grafiche, 1917.
- Gironès Saderra, T. "Restituzione del Teatro Romano di Tarragona, Spagna." (Restitution of the Roman Theater of Tarragona, Spain.) *Casabella*, no. 898 (2019): 44-51.
- Greco, G. "Peoples in the Sorrentine Peninsula, between myth and reality." In *Landscape* as Architecture. Identity and conservation of Crapolla cultural site, edited by V. Russo, 211-221. Firenze: Nardini Editore, 2014.
- Maiuri, A. "Passeggiate sorrentine." (Sorrento walks.) In edited by B. Iezzi, 91-92. Sorrento: Franco Di Mauro, 1949.
- Marini, S. "Amnesia." In *Recycled Theory: Dizionario illustrato*, edited by S. Marini, and G. Corbellini. Macerata: Quodlibet, 2016.
- Matteini, T. *Paesaggi del tempo. Documenti archeologici e rovine artificiali nel disegno di giardini e paesaggi.* (Landscapes of time. Archaeological documents and artificial ruins in garden and landscape design.) Firenze: Alinea, 2009.
- Pallasmaa, J. Frammenti. Collage e discontinuità nell'immaginario architettonico. (Fragments. Collage and discontinuity in the architectural imagination.) Pordenone: Giavedoni, 2012.
- Pavese, C. *Il mestiere di vivere: diario 1935-1950*. (The business of living: diary 1935-1950.) Torino: Einaudi, 2000.
- Purini, F. "Il nuovo e tre forme dell'antico." (The new and three forms of the ancient.) In *La modernità delle rovine. Temi e figure dell'architettura contemporanea*, edited by S. Bigiotti, and E. Corvino. Roma: Prospettive Edizioni, 2015.
- Ruggieri Tricoli, M. C., and M. D. Vacirca. *L'idea di museo. Archetipi della comunicazione museale nel mondo antico*. (The idea of a museum. Archetypes of museum communication in the ancient world.) Milano: Lybra Immagine, 1998.
- Russo, V. "On the edge of a precipice bathed by the sea: a knowledge path for the conservation of the Abbey of St. Peter's in Crapolla." *Arkos*, special number (2010): 70-81.
- Russo, V. (Ed.) Landscape as Architecture. Identity and Conservation of Crapolla cultural site. Firenze: Nardini Editore, 2015.
- Russo, V. "Memory and conservation of fragile ruins. The Abbey of St. Peter in Crapolla." In *Landscape as Architecture*, edited by Valentina Russo. Firenze: Nardini Editore, 2015.
- Settis, S. "Rovine. I simboli della nostra civiltà che rischiano di diventare macerie." (Ruins. The symbols of our civilization that risk becoming rubble.) *La Repubblica* Nov (2010).
- Simmel, G. "La rovina." (The ruin.) Rivista di Estetica no. 8 (1981): 121-127.
- Tamborrino, R. "Invisible thresholds: the reconstruction project of the Mother Church in Salemi di Collovà and Siza Vieira." *Restauro e città* (1989): 82-93.
- Valery, P. *Eupalino o dell'architettura*. (Eupalino or architecture.) Lanciano: Barabba, 1932.
- Venezia, F. *Che cosa è l'architettura. Lezioni, conferenze, un intervento.* (What is architecture. Lessons, conferences, a speech.) Milano: Mondadori Electa, 2011.
- Yourcenar, M. *Il tempo, grande scultore*. (Time, great sculptor.) 2nd Edition. Torino: Einaudi, 1985.