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Processual design: Torre Rinalda, Lecce, Italy (XVI cent.)

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Abstract

The design interprets the identified ongoing process of the tower, a restored ruin, projecting it into the future as a sustainable beach resort and bicycle rental station. The new structure, entirely in timber and lightweight panels is removable and does not bear loads on the ancient walls. The project follows Cesare Brandi's restoration principles applied to architectural composition and is reversible, compatible, recognisable and based on the minimum intervention principle. The platform, built with local stone gabions, protects the structure from the action of the sea. The new pavilion, hosting a small bar and a bicycle rental office, is designed as a fallen piece of the complete structure. A bicycle path connects this tower with the other coastal towers creating a cultural itinerary. Photovoltaic panels on the southern side provide sufficient energy to run the interior as a museum of the coastal defence of Apulia and to illuminate the tower as a contemporary urban landmark.

Keywords: architectural design, archaeology, architectural composition, architectural heritage.

1. Introduction

"Propositi quidem nostri est nova construere, sed amplius vetusta servare"

Possessoribus defensoribus et curialibus est unis consistentibus, Theodericus rex, Cassiodori Senatoris Variae, MGH, Auct. Antiq., III, ed. Th. Mommsen, Berolini 1894.

In the recent debate on the relationship between architecture and archaeology (Capozzi, Fusco and Visconti 2019), (Mariniello 2016) the prevailing thesis supports the idea that the contemporary project should take form in an archaeological site figuratively affirming its contemporaneity by contrast. This assertion characterizes most of the recent Italian design experimentation in archaeological contexts (Basso Peressut and Caliari 2014), (Cellini et al. 2009) but above all fuels the controversy that very often opposes architects and the institutions responsible for the preservation of archaeological areas. This contribution questions the need for such a figurative statement. In an archaeological area, before the architectural project, a subtraction design operation was carried out, the excavation, which is configured as a negative stratigraphic unit (Harris 1989). This operation, the archaeological excavation, was introduced only starting from the age of enlightenment: it is therefore a modern invention as the restoration project is. Archaeological excavations and restoration projects are a modern operation which aiming the past visible to the present times and, attributing value to it. The affirmation of the identity of the contemporary design layer by contrast in our opinion, does not consider the negative stratigraphic unit as a prerequisite of the design operation itself. The compositional action should therefore take into account, as in any other place, the context and the process that is taking

place in it, thus establishing itself as an instrument of figurative connection. If the main subject of the composition is the ruin that emerged from the excavation and the restoration, the project should determine a frame rather than establish itself as an independent figure or, even worse, in contrast. This principle might be considered conservative, but once the substantial modern character of the archaeological excavation and the consequent restoration is affirmed, it follows that the project which does not take them into account cannot be contemporary, and is therefore itself conservative.

2. The tower

The tower as visible today is clearly the result of a long transformation, beginning with its construction in the XVI century as payments to Nicola Saetta were recorded in 1567 (Cosi, 1989), (De Salve, 2016). Sometime later the tower suffered a partial collapse. We hypothesized that the damage was the result of an earthquake happened in 1743, with and epicentre south of Cupertino and an equivalent magnitude of 6.9 (Guidoboni et al., 2018). The direction of the prevalent horizontal local acceleration seems to be compatible with the recognizable collapse mechanism. Some historians believe that the damage visible in the tower resulted from the action of sea waves, which seems very unlikely as the missing parts face the land and not the sea. The restoration project done in 2001 by Giuseppe Leopizzi, did not restore the original volume of the tower, but selected a configuration outlining a state of decay of the monument. This project accomplished successfully the partial reintegration of the monument's image (Carbonara, 1976), with a reasonable balance between the Historical instance and the Aesthetic instance (Brandi, 1963).

3. The design

Our design proposal intends to continue the identified process, where the recent restoration is integrating part of that process, as the premise for the conformal determination of the future form and function in order to reconcile preservation and contemporary use of the monument (Strappa, 2014).

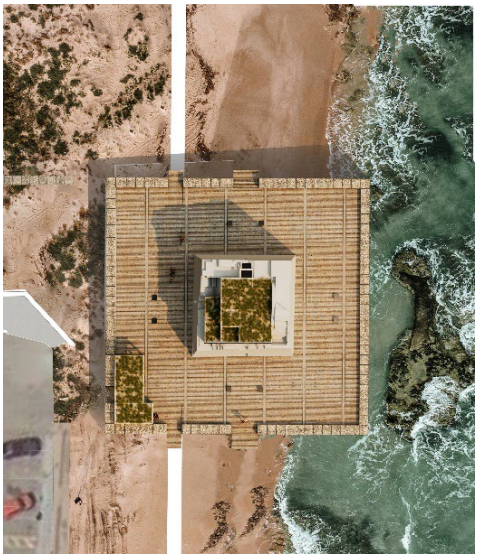

Fig. 1- Aerial view of the project including the platform for the protection from the action of sea waves blue (DRUM Design, 2023)

The structure in timber is entirely removable, and the project follows Cesare Brandi's principles or restoration applied to the architectural domain: reversible, compatible, recognisable and based on the minimum intervention (Brandi, 1963). The structure includes a staircase connecting only its roof to an intermediate level; in its original configuration there was a mezzanine slab, and a wooden staircase connecting the entrance level with this level. We included a small elevator within the structure, connecting the entrance level and the upper floor, but did not rebuild the mezzanine floor, providing access to that level from above with the original stairs. The project does not restore the original volume of the tower, but configures it as a broken figure inspired by the *tetris* video game, where the missing part lies on the platform surrounding the monument, as if it had fallen, and hosts inside a small bar, a toilet, and a bicycle rental service. We imagine the tower to be used as a touristic resort, including an exhibition of historical findings related to the history of defence of the coast of Puglia, but also part of a sustainable bicycle and trekking path connecting all the towers on the coast. The structure is clad with light weight zinc titanium panels. The platform, built with local stone gabions, protects the structure from the action of the sea. The new pavilion, hosting a small bar and a bicycle rental office, is designed as a fallen

piece of the complete structure. A bicycle path connects this tower with the other coastal towers creating a cultural itinerary. Photovoltaic panels on the southern side provide sufficient energy to run the interior as a museum of the coastal defence of Apulia and to illuminate the tower as a contemporary urban landmark.

Fig. 2- An exploded section illustrating the relationship between the new structures and the old tower (DRUM Design, 2023)

4. Conclusions

Within the international debate on design methodologies, the processual approach proposes a new interpretation for architectural design. Every project does inevitably relate to its surrounding context. Once a project is built, it becomes part of its context by determining a meaningful modification to the surrounding environment. We should therefore always consider the project as part of the process, rather than something detached from it. The main difference between architecture and the other arts is indeed this one: architecture always does have a context. The English word context comes from the Latin *contextus*, as derived from the past participle of *contexere*, to connect, with the first meaning of connection, bond. The etymology shows us clearly how profound is the meaning of context in architecture; it is a matter of relation. The different modes used to relate to the context within the design process, may be taken here as the starting point of a different interpretation of architecture as a subject, rather than an object, or to better say a product. This design was done as an experiment to prove some of the principles that we usually teach in the faculties of Architecture. It was therefore conceived as a laboratory experiment capable of demonstrating a thesis. The leading concept was to identify the process of the building as a premise for the design operation. In this case the process included the construction of the tower, the damage and finally its restoration. After the identification of the process it was possible to conceive the design as a continuation of the ongoing process. Following this method the contemporary design here does not construct its figure in opposition to the monument, nut it determines the form as a frame to better understand the monument and bring it in the contemporary world in order to preserve it for the future generations.

Notes

This project was done by a design team named DRUM Design: Alessandro Camiz (team leader) with Berke Baybaş, Erol Tan Atayurt and Erdinç Can (Özyeğin University graduate students) with the title FROZEN PAST FOR THE FUTURE. Torre Rinalda: sustainable beach resort and bicycle rental station, Team ID: DD8888. It was submitted as an entry for the international design competition Reuse the Tower Torre Rinalda (Lecce) for the reuse of the coastal watchtower Torre Rinalda in Lecce, organised by Reuse Italy, Save The Heritage, Italy. Submission deadline: 14 June 2023

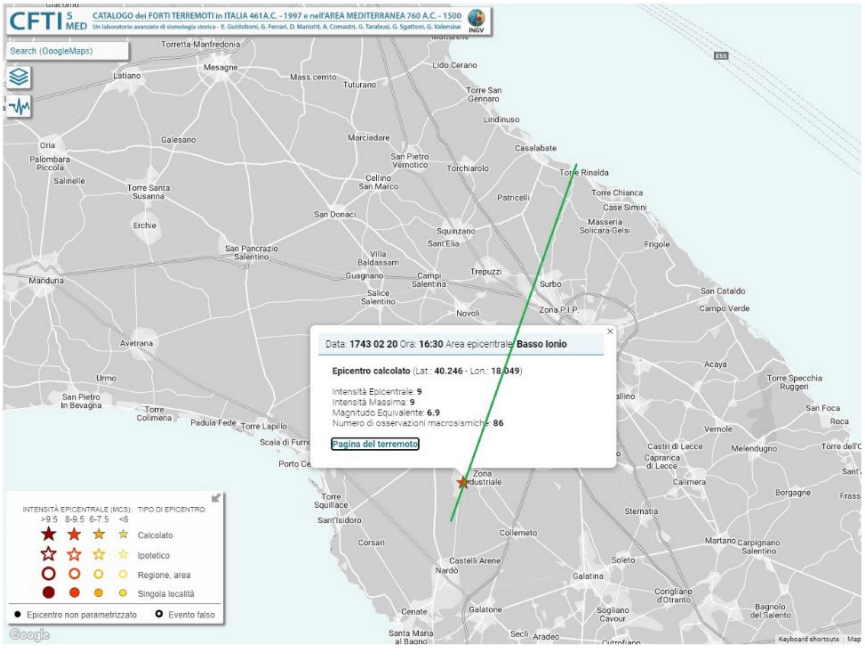

Fig. 3- The direction of the prevalent horizontal acceleration following the 1743 earthquake (Author's elaboration on map derived from Guidoboni et al, 2018)

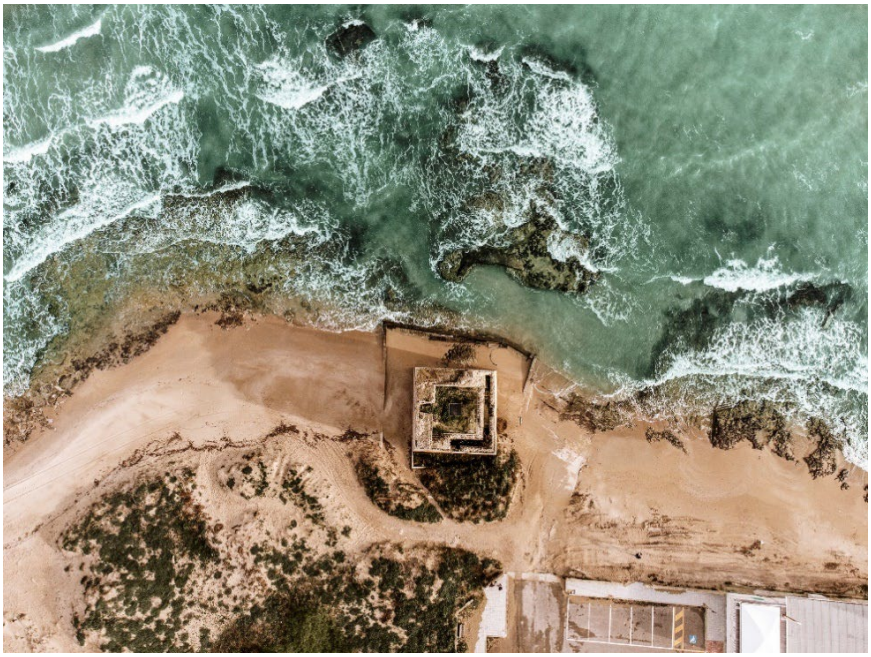

Fig. 4- Aerial view of the tower as it is today (International design competition Reuse the Tower Torre Rinalda (Lecce), Reuse Italy, 2023.)

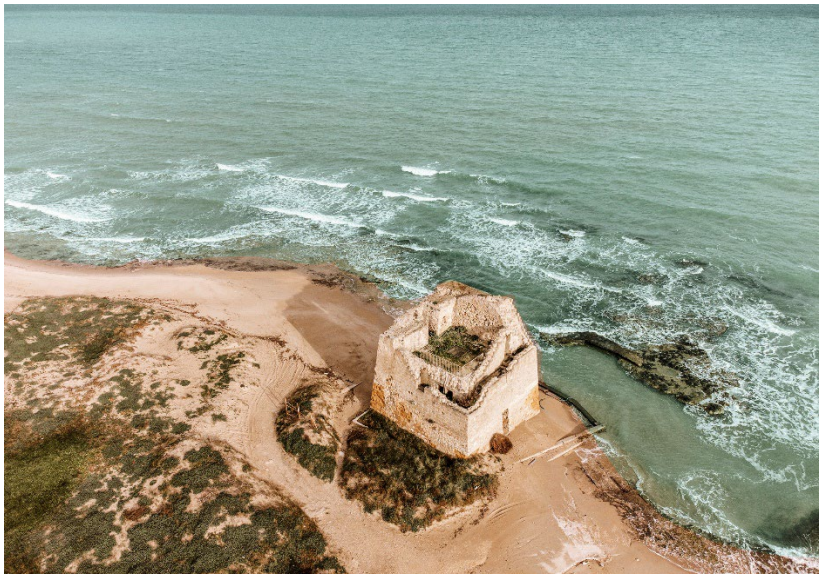

Fig. 5- Aerial view of the tower as it is today (International design competition Reuse the Tower Torre Rinalda (Lecce), Reuse Italy, 2023.)

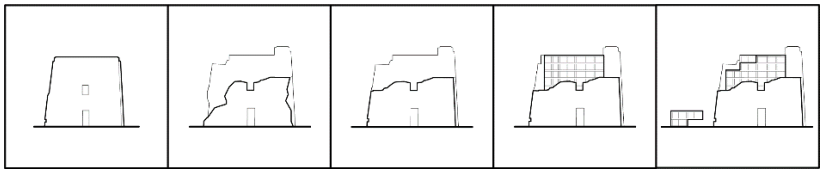

Fig. 6- The identified process as a premise for the design (DRUM Design, 2023)

Fig. 7- Night overall view of the project (DRUM Design, 2023)

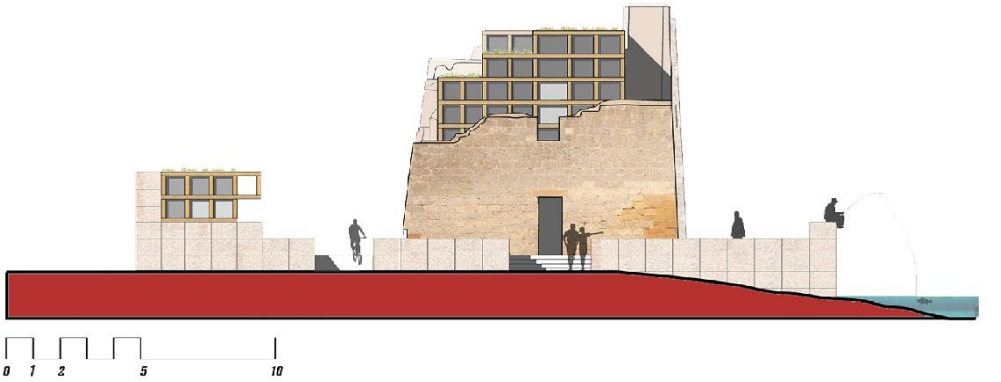

Fig. 8-South elevation of the project (DRUM Design, 2023)

Fig. 9- A rendering showing the restored tower and the contemporary use for bicycles (DRUM Design, 2023)

Fig. 10- The tower at sunset (DRUM Design, 2023)

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