

## **P4 Reflection: From the Ruin to the Re-Birth.**

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The project is questioning various aspects of the field of the restoration, of the conservation and of the re-use of existing structures in the Italian territory. The project is meant to be a provocative reflection on what it could be done on earthquake damaged buildings and it is not done today, or it is done on a real minority of the projects, leaving the ruins in a state of decaying for years waiting for a conservative reconstruction that can cost consistent amounts of public money.

The Project on the church of Santa Maria Paganica starts from the assumption that not all the historical buildings need to be reconstructed in a conservative way (bringing back the original appearance the building) and that the earthquake can be approached as the driving force for the change of the building which can gain a new layer of importance from the architectural intervention meant to be the reinforcement for the ruin as well. The Project has as final aim to see the shoring system not anymore just as a provisional supporting structure but as something that can become active part of the original building. The Shoring system becomes so a functional parasite that creates, together with the ruin of the existing building, a symbiotic relation that is fundamental and good for both the parts. The Project Moreover aim to bring back elementary function for the life of an historical city centre as the one of L'Aquila which has been depopulated for almost ten years now because of the long works of reconstruction. The parasite together with the church becomes the host for different public functions: chapel, open air theatre, study rooms and bar/ restaurant that are meant to be the starting point for the re-birth of the life in the historical city centre of this Italian city.

### **Research and design:**

The aim of the research is primarily to analyse how an Italian historical city centre gets affected by an earthquake and which are the main action to take to prevent the complete collapse of the buildings.

The research is focused on the possibility to analyse the problem of the earthquake as an architectural issue that can be solved through architectural solution. In a Seismic context such as the Italian one, which has faced 38 major earthquakes just in the 20<sup>th</sup> century, besides the prevention of the collapse of the buildings, results of fundamental importance to find a concrete and efficient way to rebuild the damages of the buildings. The research pointed out that the main issue is caused by the time of the reconstruction and by the shoring up systems. The reconstruction, that in an historical context such the Italian one can take several years to be completed, can cause a total depopulation of the historical city centres. The shoring up systems, meant to be temporary structure and for this reason designed to stay for a determined amount of time, standing on the building for a period of even 10-20 years, become permanent elements that after a certain amount of time lose also their functionality.

The research has been delineated more as an investigation of the action taken nowadays in case of an earthquake on historical city centre analysing both the shoring system and the social aspect of the work. The research was specifically meant to be as detached as possible from the design to be more as a background research on the current situation on which the project takes its foundation. Differently from many research projects done in the course of Architectural Engineering and specifically in the thematic field of "make" which have the objective of the design of a joint or of a constructive system applied then in the proper design of the architecture this research was more based on the observation of the current condition. This type of approach has been in the design period important to understand

which were the best choices to take for the project without being forced by preliminary decision took in the research phase.

### **Relation Between the project and the graduation track**

The graduation track on earthquake architecture, proposed by the chair of Architectural Engineering, aims to analyse the issue of the seismicity from the point of view of the architect and not from the one of the engineer or the technician one as often happens. The graduation track has as its specific case study Groningen, a city that gained importance for its man-caused earthquakes. The context chose for this project presents some main differences with the Groningen one and these changed significantly the output of the project as well. Groningen territory faced earthquakes of small intensity if compared to the Italian ones and the buildings have been damaged also in a minor scale. The intervention of the church of Santa Maria Paganica is an intervention on a building that is a ruin and cannot be considered a functional building anymore, while the majority of the cases of Groningen are not damaged in this scale. The main difference between the project and the other ones presented in the graduation lab is the damage on the building itself.