Inadequate Cases of Intervention in Architectural Heritage Buildings in Mexico After the September 2017 Earthquakes

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ABSTRACT

The architectural heritage in Mexico is wide, rich and varied. It has more than 50,000 archaeological sites and 110,000 buildings built between 16th and 19th centuries; as well as, 35 sites inscribed on the UNESCO World Heritage List. The two large-scale earthquakes that occurred on September 7 (Mw 8.2) and 19 (Mw 7.1), 2017 in Mexico left 2,340 damaged architectural heritage buildings throughout the country.

Due to the large amount of architectural heritage buildings damaged, the government department responsible for protecting the architectural heritage and the practitioners specialized in conservation have been overwhelmed. Therefore, it was necessary to incorporate practitioners who are not specialized in conservation, first to attend the emergency works like shoring works and later into structural intervention works. Due to the above, there were some cases in which the emergency works were not adequate, as well as some intervention proposals do not fulfil the international conservation recommendations.

In this way, this paper presents some examples of emergency work, as well as intervention proposals that have not been adequate. The common errors observed in emergency works are discussed, as well as the application of erroneous or inadequate concepts in intervention proposals. Comparison with correct intervention works are also presented.

It was observed that there are recurrent errors that are repeated in non-specialized practitioners. One of them is that it is not full understand the aim and function of emergency works and how they should be carried out to protect heritage buildings from collapses or subsequent damages. Another recurrent error is to consider that this type of buildings has a structural behaviour similar to modern masonry or concrete buildings. Some final recommendations are also presented.