

PATRIMONIO ARCHITETTONICO E PREVENZIONE SISMICA. QUESTIONI APERTE.

CULTURAL HERITAGE AND SEISMIC PREVENTION. OPEN ISSUES

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Abstract.

The paragraph 29 of the Italian Code of Landscape and Cultural Heritage (*Codice dei Beni Culturali e del Paesaggio*) includes the seismic improvement among the possible activities of restoration. This type of intervention is mainly aimed to increase the structural safety, act directly on the identified vulnerabilities; it is effective in limiting the risk for the historical building caused by its weaknesses. In these terms, the seismic improvement seems to be conceptually closer to prevention. Although codes require investigation preliminary to strengthening projects, invasive interventions are often suggested to balance the lack of knowledge. Nevertheless, the surveys carried out after recent earthquakes showed the brittleness of not compatible interventions.

The research considers information from post-earthquakes surveys as a possible tool for the evaluation of the seismic behaviour at a territorial scale; the behaviour even to low earthquakes can highlight critical elements or vulnerabilities. Deepening of the analysis can suggest hazard mitigation plan.

The paper describes the first results of the application to the Garda Lake area; the research is aimed at verifying a relationship between seismic damage and local construction techniques and to develop guidelines for preventive actions.

Keywords: *diagnosis, seismic vulnerability, stone masonry, architectural heritage, seismic improving*