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The contribution of Friuli's earthquake to the knowledge of seismic behavior of historical buildings

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The fundamental choice for the reconstruction of Friuli was to privilege as much as possible the recovery of the still standing buildings instead of constructing new ones. For the historical and monumental heritage, this choice implied the research and organization of all the available pre and post seismic documentation, in order to draft projects regarding the restoration and anti seismic strengthening of each building e.g. pictures, relieves, various different studies etc..
This brought as a consequence, for the first time in Italy, the collection of a very large quantity of information on the seismic behavior of masonry buildings that couldn't be efficiently patterned with the engineering knowledge of that time.
This amount of material has been studied with an epidemiological setting, i.e. extended to similar types of constructions. This was done starting from the mid 80s of the 20th century, and it opened new fields of research based on the reading and interpretation of seismic damages with a diagnostic purpose, which leaded the way to the studies on seismic vulnerability of building heritage, supported by systematic objective comparison.
These studies significantly increased the capacity of technical reading of architectural characteristics of the historical heritage and of the previous damages; this was done in order to insure the seismic prevention i.e. to realize focused interventions for the reduction of vulnerability in buildings that hadn't been seismically damaged yet.
At the same time, a better knowledge of the seismic behavior of masonry buildings allowed to set up more efficient intervention techniques adoptable also on historical buildings.
Particularly, this abstract is meant to refer both to the development pattern and results of the studies made from 1984 to 1994 in the GNDT-CNR field, Venice Dept, of the seismic behavior of churches damaged by the earthquake of Friuli, and to analyze the contribution that it gave in the first step of this topic and referring to the main following developments.