



Earthquake risk perception, communication and mitigation strategies across Europe
Piero Farabollini, Francesca Romana Lugerì, Silvia Mugnano (Eds.)

An historical flight and some open questions towards a pluralistic but holistic view of resilience

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Abstract

The term “resilience”, found for the first time in several Latin authors, then passed through medieval culture until intellectuals who strongly contributed to the birth of the modern scientific method (as Francis Bacon), 19th century encyclopedists, the Rankine’s quantitative definition in engineering, and finally to psychology, anthropology, and ecology, with the fundamental Holling’s contribution in 1973. In the last decades, the concept expanded quickly into social-ecological systems, disaster/risk assessment, sustainability, and adaptive capacity to cope catastrophic scenarios. Nowadays, multi-disciplinary scientists and representatives of public/private organizations largely use the term “resilience”, but with increasing ambiguity about its properties and attributes. This work presents an *excursus* through the ages and a brief (not exhaustive, of course) *state-of-the-art* regarding “resilience”, pointing out some open questions of the current debate among researchers of different disciplines, working in the fields of hazard mitigation, sustainability, risk assessment, heritage preservation, and so on. Increasing popularity but still scarce unification depict the situation; resilience still necessitates a robust effort of further multi-, inter-, trans-disciplinary research, going beyond the current fragmentation. Impressive tools supplied by Geomatics/Big Data management and extraordinary potentialities available from complex mathematical models give us now the opportunity to create ‘a network of networks’; but the fast run of technology cannot be separated by a slower and shared *Peripatetiké Scholé*, exploring philosophical and scientific theories with a pluralistic but holistic view.

Finally, this work presents open questions and suggestions of some nuclei of future research regarding “resilience” (*safety, robustness, adaptive capacity, sustainability, governance, anamnesis*) that might be exploited in future studies.

Keywords: Resilience, Multi-hazard scenarios, Risk management

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