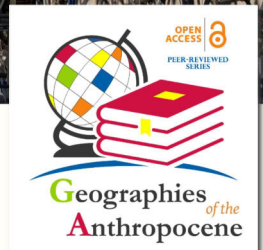


# EARTHQUAKE RISK PERCEPTION, COMMUNICATION AND MITIGATION STRATEGIES ACROSS EUROPE

Piero Farabollini, Francesca Romana Lugerì, Silvia Mugnano  
*Editors*



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ISSN 2611-3171

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## Preface

*Sebastiano D'Amico<sup>1</sup>*

This volume aims at collecting some contributions presented in the S41 “Earthquake risk perception, communication and mitigation strategies” session of the 36th General Assembly of the European Seismological Commission, held in Valletta, Malta, of which I had the honor of being Chairperson and Organizer. The ESC mission is to promote the science of Seismology within the scientific community of the European and Mediterranean countries (encompassing the area from the Mid-Atlantic Ridge to the Ural Mountains and from the Arctic Ocean to northern Africa), by promoting research studies, to extend and enhance scientific co-operation and to train young scientists.

Session S41 was very welcome during the 36<sup>th</sup> ESC General Assembly since it covered issues related to the perception and communication of seismic risk which are certainly worthy of consideration. In fact, every disaster caused by physical and natural phenomena, such as the earthquake, or deriving from human causes, always represents a cross-section of the life of a community, of society and of the affected place, bringing out the latent vulnerabilities that cause a catastrophe, the resources available and the qualities of the pre-existing (sometime complex) relationships between the population and the authorities. Indeed, it is important to consider also the social aspects also because the latter can be strongly related to the several legal aspects with particular regards to the reconstruction phase after a major earthquake as well as to analyze the communication processes during the emergency, to understand the evolution of local governance, to account of the transformations that take place in the daily life of the involved actors. Thus, social approaches can play a key role in disaster studies. In this context, the session “Earthquake risk perception, communication and mitigation strategies”, proposed and coordinated by Francesco De Pascale, Francesca Romana Lugeri, Elena Dell’Agnese, Fausto Marincioni, Francesco Muto and Piero Farabollini, had an excellent response with twenty one contributions presented by scholars from various countries: Spain, Romania, Russia, United

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<sup>1</sup> Department of Geosciences, University of Malta, Msida Campus, Malta; Vicepresident of European Seismological Commission 2016-2018; Chairperson 36th General Assembly of ESC, Valletta, Malta, 2-7 September 2018, e-mail: [sebastiano.damico@um.edu.mt](mailto:sebastiano.damico@um.edu.mt).



States, Hungary, France, Taiwan, Turkey, Portugal, Armenia, Greece, Bulgaria, Cyprus, Italy. It was an important occasion that offered original and interesting studies and reflections in the field of earthquake perception, resilience and risk communication, the use of new technologies for seismic risk investigations, with the presentation of several case studies with interdisciplinary and integrated approaches. Resilience, as pointed out by Indirli (2019), in this volume, is another important topic which needs to be addressed. Indirli presents an interesting study on the etymology of the word resilience, which in the last years has assumed ever-increasing importance, both in the academic context and in that relating to policy, to the point of being in competition with the concept of sustainability. From a social perspective, resilience can be defined as an interactive and multidirectional social process, consisting of a set of pre-existing response behavior learned during the event itself (Lucini, 2014).

A key role also was also given by the contributions that deal with the recent earthquakes of Central Italy in 2016 tackling the disaster from different perspectives: from the analysis of food management in the disaster (Marincioni et al., 2019) to the study of social resilience in mountain communities (Carone et al., 2019); from the topic of the second home tourism recovery (Mugnano et al., 2019) to the role of communication spread by the media in the context of the earthquakes of Emilia and Amatrice (Cerase, 2019). In addition, there are two contributions in which the Extraordinary Commissioner for post-earthquake reconstruction of Central Italy (Farabollini, 2019; Farabollini et al., 2019) is involved presenting “a provisional alphabet of reconstruction” and an analysis of the seismic sequence of 2016. Three contributions, on the other hand, present different seismic risk mitigation strategies in Turkey (Braucher and Giandomenici 2019; Dindar et al., 2019; Uzun and Oğlakci, 2019). Rodkin and Pisarenko (2019) present an examination of methods of statistical analysis of seismic regime and related damages. Finally, Volterrani (2019) presents and discusses a draft model for the prevention strategies in relation to the risk of disasters through an analysis of the Italian campaign “I don’t take risks”.

The result is a book that represents an essential point of reference for those interested in disaster studies regarding earthquake risk in Europe.

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Increasingly, socio-natural risks and disasters represent the result of an unsustainable interaction between human beings and environment. The current scientific debate has generally agreed on the idea that the impact of natural hazards needs to take into account the social vulnerabilities and exposures to risk of the affected population. The most recent earthquakes have unequivocally shown the complexity of the phenomena and their multi-scale dynamics. Indeed, the territory is the combination of natural, social and cultural environment and only by exploring its anatomy and physiology, it will be possible to manage and protect it in the best way.

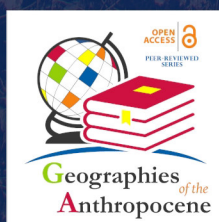
This volume collects a quite wider range of national and international case studies, which investigate how socio-natural risks are perceived and communicated and which strategies the different communities are implementing to mitigate the seismic risk. This publication has been possible thanks to a fruitful discussion that some scholars had at the 36th General Assembly of the European Seismological Commission held in Malta from 2 to 7 September 2018.

**Piero Farabollini**, Ph.D. in Geomorphology (University of Perugia, Italy). He is Associate Professor of Geomorphology and Physical Geography at the University of Camerino (Italy), Earth Sciences Department and Coordinator of geological and geothematic field mapping and hydrogeological risk assessment projects. Previously he was coordinator of the Communication group of the National Council of Geologists and subsequently President of the Marche Association of Geologists. Currently he is Extraordinary Commissioner for Reconstruction after the Earthquake in Central Italy.

**Francesca Romana Lugerì**, geologist, sociologist, geographer (Sapienza University, Rome, Italy); Ph.D. in Environmental Sciences and Public Health (University of Camerino, Italy), she is researcher at ISPRA Institute for Environmental Protection and Research. Since 2016 she is Research Associate at the University of Camerino. Topics of current research projects are: unconventional scientific communication, dissemination, education; science popularization for risk consciousness and prevention; landscape analysis, geological and geothematic mapping, GIS developing.

**Silvia Mugnano** is Associate Professor of Urban Sociology and her research interests include housing, urban transformation, and socio-natural disaster studies. She is teaching nationally and internationally on tourism and local development, and she is intensively working on promoting the topic of socio-natural disasters in the sociological debate. Her recent publications on the topic include *Territori Vulnerabili* (FrancoAngeli, Milan, 2017) and a Special Issue on "Socio-Natural Disaster, resilience and vulnerability: the territorial perspective in Italian current debate" in *Sociologia Urbana e Rurale* (2016) and several articles among which "A New Normality for Residents and Tourists: How Can a Disaster Become a Tourist Resource?" (Springer, 2016).

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ISBN 978-88-943275-6-4