

Perception of seismic risk in the new Anthropocene geological era. A comparison between two case-studies: Calabria (South Italy) and Malta

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About two centuries ago, the Earth entered the Anthropocene, a new geological epoch in which man has a marked impact on climate and the environment. In comparison with the slow passing of previous millennia, our species has, in a very short time, radically altered the world's ecosystems. For some years now, interest in Italy has been increasing in Geoethics and the ethical, sociological and cultural implications of Earth Sciences. This involves amplifying the prospects and expectations of Geosciences and highlighting the fundamental role of geological and geographical studies in finding solutions to the practical problems that man faces which are also compatible with the preservation of nature and the planet. Indeed, man can even be an active participant in natural catastrophes in the sense that he is able to amplify the damage and natural dynamics. On the other hand, as much as these phenomena can only be foreseen to a limited extent, intervention is possible with regards the parameters of risk which are dependent upon anthropisation, such as those of vulnerability and exposed value that mark the difference between a natural event and a calamity. Therefore, through information about and knowledge of risk, it is possible to keep damage to a minimum by refining techniques of prevision and prevention. Geographical studies orientated towards examining descriptive natural elements and analysing social behaviour when people are faced with natural risks generated by assumed given and exogenous sources can be historically placed within the area of research into the perception of natural risk. In this context, a questionnaire was given to primary and middle school pupils in an area of Calabria which has recently been affected by an on-going seismic sequence, widely felt by the population. The same questionnaire was given to students in Malta, a zone of low-to-moderate seismic hazard where earthquake awareness is not culturally strong. The Maltese islands have, however, been affected historically by a number of earthquakes, the epicentres of which were in Eastern Sicily, the Sicilian Channel or as far away as the Hellenic arc. Some of these earthquakes produced considerable damage. In this way, the knowledge effectively possessed (relating to age, experience and area of origin), and the analogous and differing perceptions of earthquakes in different areas are highlighted. The data collected will be used to project and create new informative instruments through which students will become "geographic information volunteers", studying natural risks such as earthquakes and augmenting the territory's level of resilience. Consequently, local institutions will be able to refer to information about individuals' perception of seismic phenomena and use it to realise effective environmental planning and an efficient strategy of prevention.