

Ethical Implications of Seismic Risk Communication in Istanbul – Insights from a Transdisciplinary, Film-based Science Communication Workshop

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For more than a decade, social science studies indicate that there is little or no correlation between the provision of scientific information about geohazards and risks and the adaptive changes in individual or community behaviour that would reduce risk. Bridging that gap to effectively convey hazard science ‘the last mile’ to those communities at risk raises a number of ethical issues about the role and responsibilities of geoscientists as communicators. Those issues emerge from a methodological shift away from the dominant interpretation of seismic risk communication as a transfer of scientific facts to “the public”, towards more inclusive transdisciplinary communication strategies that incorporate peer-role models, adopt social network-based strategies and directly engage with communities in motivating preparedness actions.

With this methodological shift comes ethical dilemmas. What are the target-groups that should be prioritised? What are the professional expectations and levels of personal engagement required of geo-communicators? How able and willing are geoscientists to include other forms of knowledge (e.g. from local communities or other disciplines)? What media formats can reconcile argumentative, informational “matters of fact” with sociocultural and psychological “matters of concern”? How should scientists react to political controversies related to risk mitigation and its communication? In the context of these ethical concerns, many geoscientist struggle to switch from conventional communication modes in which they are the technical ‘experts’ to more community-centered, participatory modes of public engagement.

We examine this research question through a case study on seismic risk communication challenges in Istanbul, a megacity with one of the highest seismic vulnerabilities in the world. Currently, there are few formal mechanisms to facilitate interchange between academic geoscientists and the general public in Istanbul. In order to reduce the city’s vulnerable building stock, the civic administration has initiated major seismic retrofitting and reconstruction projects. These projects have led to widespread civic unrest and social division, with inhabitants of urban transformation areas widely complaining that their views are neither represented in the procedures of the mitigation measures nor in the seismic risk communication that accompanies them. A growing lack of trust in risk mitigation measures adds to fatalistic attitudes to undermine individual and neighbourhood preparedness actions.

It is in this contested, politicized arena of multi-stakeholder interests that geoscientists attempt to communicate Istanbul’s acute seismic threat. Following a critical reflection on the geo-ethics of current science communication methods, we explore the potential of transdisciplinary film-based methods to provide alternative frameworks for communicating to and engaging with at-risk communities. We argue that such an approach offers novel opportunities to address key ethical concerns by bridging different communication cultures and promoting a greater reflexivity in science communication.