



Reframing Geoscientists' Communication: back to 2.0

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Once there was web 2.0, remembered as the radical transformation in the information and communication domain, whose impacts on the society are still ongoing and unknown in the details. Now we are experiencing a new phase of the digital age, that some critical thinkers depict as characterised by excessive communication, information and consumption, where human beings have become a commodity. (Han, 2018)

In this framework, "Do we, as scientists, need to concern ourselves with whether or how the information is used?" (Shafer, 2008). The answer is "Yes" with some precautions. Undoubtedly, the web is reshaping the information scenario. The boundaries between users and producers of information are vanishing, causing a side effect: the "information deluge" that particularly in case of natural or environmental disasters reveals the crucial issue of validation and trustworthiness of the information produced and exchanged by the web users. Knowledge, opposed to non-knowledge, makes the difference: everybody must have access and freedom of information, but comprehension and understanding are prior to participating effectively. In a click-worthy society, the information spreads at unprecedented speed, and the problem arises when it is fake, as the non-knowledge is misleading and could potentially menace democracy (Boniolo, 2010).

In this critical scenario, which is the main role of geoscientists when delivering information?

The challenge is to make sure that geoscience is shared effectively, with the right level of context and accessibility. Give access and facilitate the use of geoscience-based information, to make people more competent users of science information is a two-fold goal or challenge: on one side geoscientist should address their communication strategies towards the general public, on the other hand, they should make geoscience easily accessible to decision-makers. In both cases, scientists not so often have a clear picture of laypeople and decision makers' information needs. From a communication perspective, the outreach communication programme on geosciences/risk/climate change have positively evolved in the last years, and best practices and guidelines to bring these issues to the public are widely discussed and practised. However, the weak point seems still in the relationship with decision/policy makers: according to Yale Climate Opinion Survey, the 70% of Americans think climate change is ongoing, but they will not decide energy policies, whilst decisionmakers and policymaker will. Neither scientists decide energy policies, albeit often decisionmakers ask scientists certainties and responsibility on consequences, without understanding that the dialectic knowledge-uncertainty oils the wheels of the scientific research. Hence, to reframe communication, scientists should be able to "re-build" the relationship of trust between scientists and society, and between scientists and policymakers, in the spirit of web 2.0 principles: sharing and collaboration to proactively protect the vital role that science plays in our society. Making clear the role and the responsibility of scientists allows decisionmakers to understand also that uncertainty is not a vacuum but a "source of actionable knowledge" (Lewandowsky et al., 2015) that calls policymakers to take the full responsibility of actions, informed by science, to better cope with natural hazards and environmental issues.