



From «information deluge» to explicit knowledge: how web technologies and web collaboration could support Natural Hazards Communication

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In the last 20 years the debate on disasters preparedness and relief operations underlined the need to evolve from “war” against hazards to “preparedness” in order to decrease vulnerability [Wisner et al., 1994]. In this perspective the key word “resilience” fosters a cultural change that should drive the risk & emergency management towards a participatory dimension - involving scientific communities, experts, civil protection bodies, media, citizens, volunteers, civil society -: from protection (passive behaviour) to resilience, supporting a wide responsibility and proactive behaviour (Longstaff, Armstrong, Perrin, 2010). Without any doubt, recent disasters highlighted how the new media increase the information complexity; the internet and the web 2.0 have augmented information and data availability, however some critical points are arising: easy access to information, precision and reliability, that are at the centre of the current debate. The internet “information deluge” is a continuous and rather chaotic flow, hence how to give answer to the increasing need of clear, and trustworthy information on NH? How to share knowledge? How to support a citizen-science perspective? Which are the best practices to switch towards a new resilient information ecosystem? The challenge is to find models and tools to build an open and structured knowledge to facilitate the access to validated and reliable information, build a common understanding on NH and local risks, so to react and take the right decision in order to cope with and reduce the impact of disasters. The confusion and misunderstanding on natural disaster terms is often underestimated in its consequences. Terminology could be a source of ambiguity and terminology associated with identifying and communicating risk is a relatively new science (F.M. Christensen et al., 2003). It is needed to start back from «words», from their meaning and relations between concepts and terms, as precise comprehension allows a more “precise” resilient behavior. A “Natural Hazard Wikisaurus” (NHW) is here proposed as a “matrix” of a model to be used in “practice”. The NHW is a web environment of interrelated terminological tools: glossary, thesaurus, wiki; an augmented «terminology tool» conceived as a collaborative virtual source of validated information and knowledge on Natural Hazards and Civil Protection, to sustain and support a common understanding. Thesaurus represents the building block of knowledge, enabling the “know-how” on NH, whilst the Wiki selects and organizes the praxis of natural hazards management. NHW is intended as a structured and collaborative web platform with validated information on geosciences that could be integrated in other websites; the overall aim is to propose an operational and collaborative approach for acknowledged practitioners, citizens, civil servants, media representatives, and students allowed to collaborate or to retrieve information through the collective content validated by the scientific users of the platform. Furthermore, this first step could foster a next step that will take advantage from the power of «linked data» so to contribute to a natural hazard semantic, or to a «semantic disaster resilience».