

Towards a resilient crisis governance: Assessing the potential of the net-centric approach.

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Rationale for the project

- The international disaster management literature has questions the reliability and legitimation of formalized response organizations. Response organizations typically organize their efforts in terms of the '3-C' governance model. The assumption is that disasters cause 'Chaos', which can be put under 'Control', by a strict 'Command' structure.
- This project identifies disaster response practices and conditions that can lead to net-centric governance. It is based on the idea that the quality of life at times of crisis and disasters will be determined to an important extent by the ability of the responding community and those affected by the crisis. Information and (big) data management are crucial parts of the approach.

Theory

- Netcentric governance is defined as connecting self-directed networks of heterogeneous stakeholders, within an environment enabled by shared technological and organizational infrastructure.
- A mode of governance is considered 'smart' when it is conducive to timely and effective collective problem-solving under conditions of high problem complexity.
- Netcentric approach implies each of these networks is 'programmed' and connected to other networks by 'switches'.
- Programming is "the ability to constitute network(s), and to program/reprogram the network(s) in terms of the goals assigned to the network" (Castells, 2009: 45).
- Switches "connect and ensure the cooperation of different networks by sharing common goals and combining resources, while fending off competition from other networks by setting up strategic cooperation" (ibid.).

Castells M. (2009). *Communication Power*. Oxford, New York: Oxford University Press.



Research approach and method

- We combine ethnographic studies with network analysis and semantic analysis, to understand response practices and to chart patterns of programming and switching and information streams among and between heterogeneous networks.
- We use Social Network and Semantic Network Analysis to map patterns of interaction
- By analyzing the consequences of interconnecting response organizations with community networks, we identify the possibilities of a more adaptive disaster governance.

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Aims and empirical contexts

The project contributes to a legitimate and reliable, that is 'smart' disaster response to foster societal resilience. The project aims at developing principles of net-centric governance, to be implemented in both humanitarian and EU disaster response.

- 1) Research in highly prepared western countries which are directed to use formal governance structures to plan coordination (the Netherlands);
- 2) research in humanitarian contexts where formal governmental structures are often lacking, or seriously compromised (Nepal, Malawi).

Discussion

- The different contexts show a striking parallel: citizens help themselves and inform each other through social media platforms, generating bottom-up information networks.
- The problem with big data in disaster response is: know what you need to know and (lack of) collective sensemaking.
- From Information Warehouse to Trading Zones
- Accountability, local ownership and legitimacy

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