Communicating Disaster

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Communicating Disaster—Six maxims for a new take on disaster research
Final report

Disasters, with their looming character of utter destruction, have always played a significant role for societies, even in times of relative peacefulness. With the increasing importance of the media, disasters however seem to have gained omnipresence over the past decades. We do not only obtain constant information on (potential) disasters that may have concrete consequences for us, but are continuously updated on catastrophes from the remotest corners of the world. The amount of information, pictures, or video snippets directly taken from a disaster site increases dramatically, and one extreme event seems to make way for the next, striving to gain our attention.

The way we perceive and relate to such disasters has thus most probably changed, as have the possibilities and ways of dealing with disasters modified by these altered informational and communicative dynamics. More than ever, the disasters of others seem to have become our business—be it as onlookers, as helpers or as scholars. The closing conference of the research group 'Communicating Disaster' (26–28 January, 2012) thus bore the heading: 'Dealing with the Disasters of Others'. It was the final of a number of activities by the group. This report summarizes some general results of a year full of discussions and insights.

Framing a communication-based program for disaster research: six maxims
The research group was organized by Prof. Dr. Jörg Bergmann (Sociology, Bielefeld University), Prof. Dr. Heike Egner (Geography, University of Klagenfurt) and Prof. Dr. Volker Wulf (Informatics, Siegen University), and coordinated by Dr. Sarah Hitzler and Marén Schorch (both Sociology, Bielefeld University). It provided a research setting for 29 renowned international researchers of the social, natural and information sciences as well as the humanities who spent working periods between a couple of weeks and several months at the ZiF.

The group had set out in November 2010 to challenge classical perspectives of disaster research and establish a novel, communication-based approach. This approach can be sketched out under six maxims, which serve to frame an alternative research program for disaster research:

1. Disaster research needs to be analytically independent of disaster management
2. Disaster research needs to take seriously the social character of disasters
3. Disaster research needs to include research into communicative processes
4. Disaster research needs theoretical disengagement and grounding
5. Disaster research needs to appreciate single cases' *haecceitas*
6. Disaster research needs a flexible notion of disaster

These maxims will be outlined and elaborated in the following.

Disaster research needs to be analytically independent of disaster management
Traditionally, disaster research focuses on the planning, management and mitigation processes of a disaster, relying mainly on quantitative methods for analyses. A critical implication of this is that the researcher is usually too close to the rationalities and necessities of these practical fields and therefore unable to keep the distant view necessary for analysing the social dynamics of disastrous events. But scientific concepts of disaster are always 'second-order concepts' (Alfred Schütz 1971), relying on the first-order concepts of disaster that will be found in the views and everyday activities of people, groups or organizations. In order to develop an analytic and scientific understanding of the social unfolding of disasters it is crucial to get access to these activities in and through which events become disasters.

Disaster research needs to take seriously the social character of disasters
Hartman and Squires (2006) observe that, no matter what causes an extreme event to happen, "there is no such thing as a natural disaster". A natural event is never a disaster by itself, since any natural event needs the involvement of humans or their living spaces in order to be perceived as disastrous: it is thus by its effects on people through material damage and casualties that an extreme event becomes a disaster. Even these effects, however, are no 'hard determinants', but result from culturally shaped processes of interpretation and communication through which the disastrousness of the event is determined. Disaster research that does not take seriously the social constructions superimposed on whatever happened and instead aims exclusively to objectify the event by scales and numbers will overlook a very important aspect of the 'nature' of any disastrous situation.

Disaster research needs to include research of communicative processes
The social character of disasters implies a hitherto unacknowledged importance of the communicative processes that complement them. A vast array of communicative activities precede, accompany and follow a disastrous event, and their analysis will not only provide insight into the course a disaster takes, but just as much into what makes it a disaster. The idea of communication, of course, is no stranger to disaster research. It is, however, predominately conceptualized as an imperative, as the right way of determining and passing on information to the appropriate addressees. Such an understanding falls far short of the complex achievement of even simplest acts of communication. Communication ought to be understood and analyzed as a context-dependent as well as context-shaping, autopoietic social instrument which, rather than merely reproducing fixed meaning, produces and adapts content over time. Thereby, it has immediate effects on a social situation: in communicating about a disaster, people actually produce it as the specific disaster they mutually experience.

Disaster research needs theoretical disengagement and grounding

In order to analyze the social and communicative processes involved in the construction of disasters, a distant point of view is necessary. Rather than relying on first-order observations (meaning simultaneous distinctions and denominations of things) which remain within the system of the disaster, second-order observations (understood as simultaneous distinctions and denominations of observations) based on systems theory allow to step out of the immediate complexities of the field, forming a reflexive perspective on how the first-order distinctions came about. Adopting observation theory to disaster communication and disaster research allows a deeper insight into the social practices related to disasters as well as the subtleties of the social construction of disasters. Combining this approach with an understanding of communication as a process of situated mutual and ongoing production such as held by ethnomethodology, provides a range of new insights into the nature of communication processes in disaster contexts, shedding light on who defines what, when, how, in which context and with what consequences in disaster related communication.

Disaster research needs to appreciate single cases' *haecceitas*

Taking seriously the communicative processes of extreme events demands for a research methodology that is able to capture the particulars through and with which they construct disastrousness. Qualitative approaches, in contrast to the quantitative practices traditionally embraced in disaster research, take seriously the uniqueness, the *haecceitas* (Harold Garfinkel 1967), of any social situation. They rely upon the lived-in-a-world terms as a basis: the first-order observations of those who experience, witness, report, cope, engage themselves or in any other way deal with a disaster. Not taking as a starting point so-called objective facts such as the magnitude of an earthquake or a figure denoting the material damage sustained, qualitative methods can engage with the necessarily messy and manifold details of what a disastrous situation means to those caught in it, and what they do to reinstate sense and rationality of actions.

Disaster research needs a flexible notion of disaster

Rejecting objectifying points of reference as a starting point entails a challenge with regard to the very subject matter: It renders it nearly impossible to formulate a stable definition of what a disaster is. The prevailing positivistic notion with its emphasis on definitions based on standardized aspects such as the amount of damage, number of victims or other countable items can be contested by the critique that standardization *à tout prix* reduces the complexity of a disaster to a great extent. At the same time, it cannot be dismissed that standardizations and clear underlying definitions can serve as a stable *tertium comparationis* which make possible comparative research as well as being indispensable for a number of practical fields connected to disasters, such as insurance companies, disaster management institutions or relief organizations.

A way out is offered by supplementing existing positivistic definitions with a definition embracing a relativistic perspective. Such a definition is necessarily more flexible and less clear-cut, while creating a link to the life world of the people affected and hereby allowing contextualized research that includes the everyday-life understanding of a disaster. The supplementary working definition developed by the research group read: "A disaster is a breakdown of established social order and the ordinarily expected coping strategies within a community or society". Obviously, this approach entails the challenge of contextualized terminology: The definitions and understandings will differ in regard to local understanding and interpretation and this poses obvious restrictions on comparative research. Resorting to a qualitative research

perspective thus brings about a reduction of the scope of its analytical results, but will permit better and more precise understanding of the idiosyncrasies, inherent dynamics and situatedness of a disaster and of those affected by it.

Working on 'communicating disaster': reference to time and space

The maxims sketched out above framed and opened up the research topic for the research group. Analytically, they were accompanied by two forms of heuristic: a temporal and a spatial dimension. According to Kant, time and space are a priori notions to the very possibility of comprehending sensory perceptions. Both are ways of rationally organizing the course of chaotic events, thus of imposing distinctions in order to make sense—both on the first level of observation, i.e. the perspective of those affected, and the second level of observation, i.e. the perspective of academic analysis.

Time

The temporal dimension is regularly relied upon in the discussion of disasters. The unfolding of a disaster is often captured in the imagery of the 'disaster life cycle' applied in most emergency management strategies, which identifies six central functions for management activities: preparation, response, recovery, mitigation, reduction and prevention. Trying to adapt this cycle to the communicative processes in disastrous situations, however, proved to be too inflexible an approach. While the temporal dimension of 'before', 'during' and 'after' can be identified for every disastrous event, despite their diversity in cultural setting, type, length and degrees of the events, communications will often find their own way of structuring what is going on. The media, for instance, aim to present up-to-date, 'new' news even in situations in which no new information is available, and resort to reorganizing existing information. Social media may speed up reactivity to specific situations of distress, but may also ventilate obsolete information, producing false alarms.

Time thus needs to be understood as a way that actors use to structure and make sense of the unfolding events—*in situ* as much as in retrospective processes of interpretation and understanding.

Space

The concept of space has recently found its way into debates on disasters in its second-order appearance in the form of *spatialization*. The social understanding and manipulation of space is highly consequential for the understanding of disasters and disaster-related activity: "Space and spatial or space-related semantics, just as risks, can be conceived as media of communication that fulfil the function of contributing to social structuring and order formation" (Egner & Pott 2010: 231). This is tied to the fact that extreme events leading to a disaster always happen somewhere; they literally *take place*.

The place that a disaster *takes* is never just a single co-ordinate on a map. Localizing a disastrous event will necessarily create new social spaces; a distinction is drawn between a space for those who are affected by an event and a space for those who are not. This is as true for risk assessment, for instance in the design of risk maps, which declare some areas safe and others out of bounds, and while both may be only minimally different, the consequences will be substantial. Spatialization also is a contingent element of the organization of social spaces via geo-semiotics such as signs bearing pictograms or written information. Such pre-structuring gains the impact of facts that need to be stable and reliable in cases of crises.

Finding new topics for disaster research

Adopting the perspective of a communication-oriented, theoretically grounded and inductive research program gave rise to a number of topics which are not yet well established within traditional disaster research, and provided the chance to shed new light onto other, more conventional themes. In a range of different research events, the group held lively and occasionally fierce debates:

- The role of cultural and historical relativity in the definition of what a disaster is was addressed, using empirical case studies of historical and cultural aspects of various disaster events.
- Disaster communication was investigated from a micro perspective with the aim to reveal intrinsic patterns of e.g. alarm communication or to analyze how media correspondents structure their reports on disasters.
- Since it is nearly impossible to observe disasters in their actual unfolding as a researcher, the role and explanatory power of simulation was debated regularly. Technical simulations such as CERN's particle physics simulation and social simulations such as disaster scenarios for disaster management or operative teams were analyzed, members of the research group took part in LÜKEX 2011, a nationwide disaster set-up at the administrative level simulating an attack on crucial IT systems, and additionally the research group hosted an ethnological art project on emergency provisions which worked with psycho-diagnostic tools (group *Xperiment!*).
- Research in the context of CSCW (Computer Supported Cooperative Work) and current developments of web-based technology and content, particularly the social media, were intensely discussed with regard to their impact and potential for information management and communication of a wide range of actors in disasters.
- From a more technical perspective, several researchers pointed out that an awareness of the communicative peculiarities of disaster situations is a crucial prerequisite for the adequate design of tools and spaces. The increasing role of technology for disaster management at the same time makes relevant the implications of its breakdown in critical situations.
- Finally, a topic relevant to several discussions concerned the role of media in the definition and shaping of disasters. Media take on a special position in disasters as they literally serve as mediators, seemingly bridging the distance between those affected and those not affected by the event. This dependency accords control to the media, which are in the position to direct their users' attention and, to some degree, level of involvement and engagement.

Time and again, we were confronted in our discussions that our take on the subject matter was necessarily paradoxical. While the general everyday perception seems to be that disasters are on the increase, for most of us disasters are not based on first-hand experience but on second-hand information: Disasters really are mostly the disasters of others. The media, media recipients, disaster management, politics, and not least researchers are confronted with a paradox form of involvement: *Doing something* with the disaster while not really being affected by it. This paradox needs to be reflected, addressing the question how this positioning of non-affected media, recipients, relief organizations, researchers etc. affects the perspective on the involvement. Such reflexivity seems to be important specifically for research on disasters in order to avoid the traps of either adopting in a naïve humanistic mode the viewpoint of the disaster victims or adopting in a technological mode the viewpoint of political actors and disaster management organizations.

As researchers we can always resort to a distanced and generalizing point of view, but the danger is not only to disregard the uniqueness of every single disaster but also to lose sight of

the victims. While the research group has only begun to sketch out a perspective for a field of mainly qualitative disaster research on communication, this perspective has already led to a number of new questions and tacks, a few tentative answers and a range of new cooperations, bringing together people from diverse disciplines and research areas as well as practitioners who have identified common interests and profited from each others' points of view. Most of the work remains to be done in order to further develop the field—but the year at the ZiF may have planted a handful of seeds that could bear fruit—of which nature cannot yet be foreseen.

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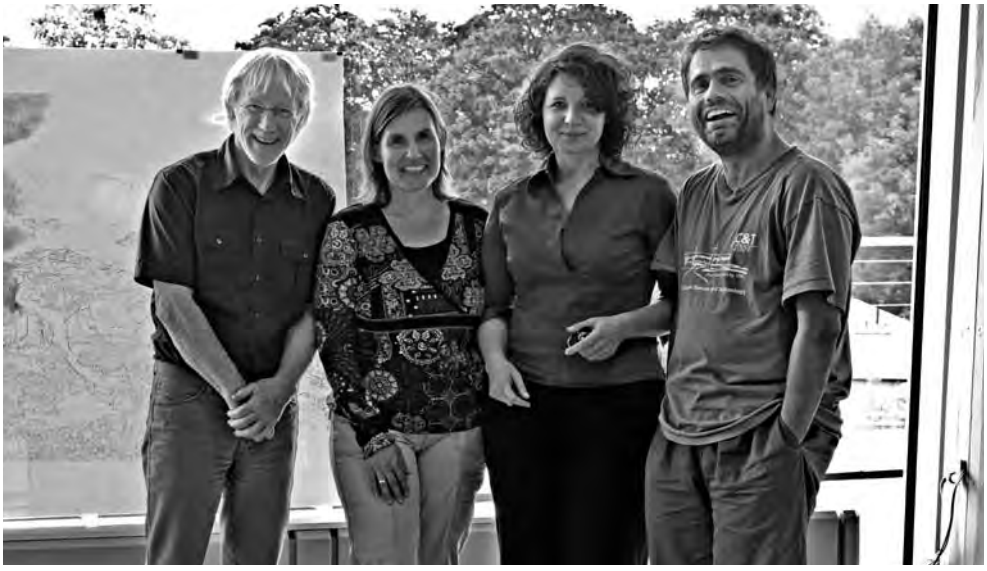

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Informationen ***Further Information***
zur Forschungsgruppe *Communicating Disaster*
→ www.uni-bielefeld.de/ZIF/FG/2010CommunicatingDisaster/

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