## Doctoral Workshop: The History of Climate Change, Natural Hazards and Natural Disasters



27 - 29 May 2010

**Sponsors:** The Rachel Carson Center for Environment and Society (RCC), Munich and the Institute for Advanced Studies in the Humanities (KWI), Essen

Conveners: Uwe Lübken (RCC), Franz Mauelshagen (KWI), Franziska Torma (RCC)

Academic research into natural disasters and cultures of risk is one of the cornerstones of the Rachel Carson Center for Environment and Society (RCC). Particularly prominent in this field are questions about forms of cultural adaptation, management and memory of actual disasters. This workshop, held in cooperation with the Institute for Advanced Studies in the Humanities (Kulturwissenschaftliches Institut, KWI) in Essen from May 27 - 29 at the Rachel Carson Center, was charged with the goal of enabling interdisciplinary dialogue within the field of research into natural disasters and in particular giving a forum to young academics to discuss their current dissertation research.

Following a welcome address by the RCC Director Helmuth Trischler and introductory remarks by the workshop conveners Uwe Lübken and Franziska Torma the first panel saw the presentation of "KlimaKultur," a major research area at the KWI in Essen; project director Franz Mauelshagen and doctoral students Maike Böcker, Ingo Haltermann, Karin Schürmann, and Gitte Cullmann elaborated on two key projects within this research area: "Remembering Catastrophe" and "Shifting Baselines." The central thesis held that the main goals of mitigation and adaption which are necessary for the societal management of climate change are contingent upon a comprehensive cultural shift. The results from both projects will form the basis for questions related to learning from experiences of past natural disasters and to their influence on adaptive processes. The passage of time and (as a consequence) the dislocation of disaster and environmental memory from social reference points is, according to Mauelshagen, of immense significance for the perception of disasters and of the environment and has until now been notably absent from research into environment and society. The doctoral candidates from KWI were able to give some insight into the

empirical use of these concepts. By means of "environmental-biographical interviews" - in Chile, Germany, Ghana and the USA, among others - specific patterns in contemporary perceptions of environment and disasters have been sought, allowing the extraction of basic information for functional strategies for adaptation to the challenges of climate change. The long term goals of these projects are to get results that can translate into political and practical application; an optimal use of lessons learnt from experiences in history, and improved communication about natural hazards, which in their turn can raise environmental awareness and motivate changes in behavior.

In his keynote lecture, **Martin Voss**, Director of the Institute for Disaster Research (Katastrophenforschungsstelle, KFS) in Kiel, gave a presentation on the fundamental aims and concepts in sociological research into disasters. He referred explicitly to the recently deceased Lars Clausen (Kiel), and honored his extraordinary role in establishing sociology of disaster as an academic field. In drawing on the latter's macro-sociological process model "FAKKEL," Voss pleaded for a new evaluation of the terms "catastrophe" and "disaster." Both terms are part of a chain of referentiality which has become lost in their day to day use, leading to a truncated perception of extreme events. This introduced one of the central topics of the conference; what do societies understand as being a (natural) disaster, and how are such events perceived?

The second panel focused on natural disasters in the Rhineland. **Verena Twyrdy's** (Bonn) paper took a historical geographical perspective on the administrative strategies for flood management on the Lower Rhine in the nineteenth century. She was able to show that it was primarily economic factors which drove the authorities to find new strategies for coping with flooding crises, measures which ultimately led to a complete restructuring of the Lower Rhine. **Patrick Masius** (Göttingen) took issue with the idea of solidarity in the event of disaster in his research. Using the example of the Rhine flooding of 1882/83, he proved how the mobilization of aid was a decisive factor in the temporary formation of a sense of local solidarity. Meanwhile, attempts to utilize the floods for nationalistic purposes had no effect on the actual structures of solidarity that had come into existence. The political instrumentalization of disasters as well as at direct socio-economic reactions to them, as seen in these two contributions, would seem to be a fruitful endeavor indeed.

The subsequent session concerned itself with comparative perspectives of natural disasters. **Michael Zeheter** (Constance) drew a comparison between outbreaks of cholera in Madras and in Quebec in order to reconstruct the reactions of the British colonial government. Although the challenges faced were comparable, two different strategies resulted, with the emphasis on medical treatment in India, but on prevention in Canada. According to Zeheter, this was the outcome of the differing perceptions of the urban environment. The reactions to the cholera epidemic served the

expansion of colonial power. Nature and the environment more than proved themselves in this context to be the site of power struggles. **Katrin Hauer** (Salzburg/Vienna) looked at similarities and differences between storms on the mainland in the province of Holland and in the eastern Alps during the early modern period. Alongside the reconstruction of regional weather conditions, Hauer proposed a cultural-historical method of analysis, with reference to the key terms perception, interpretation, management and memory, in order to negotiate the interface between the physical and the cultural world.

In the fourth session, **Felix Mauch** (Munich) presented his research on forms of memory of storm floods and their formative function for the specific culture of disaster in Hamburg. By exposing the plurality of simultaneous strands of memory and motives he painted a broad picture of the constitutive conditions and acts which gave the storm flood of 1962 in particular its prominent place in civic memory. Following on from this, **Arne Harms** (Berlin) elaborated on his ethnological research into the Sundarbans in India. He highlighted the important role of social memory of extreme natural events for forming the basis for a common identity of the affected inhabitants. In addition, as Harms pointed out, collectively shared memories of disaster also reduced vulnerability and the need to migrate out of harm's way by fostering mutual support and solidarity in case of emergency. Both contributors identified a close interlacing of natural and socio-cultural processes in the act of remembering natural disasters. Going beyond commemoration, cultures of memory mirror the willingness of a society to engage with the extreme elements of the natural world. During the discussion, it was suggested that the act of "forgetting" a natural disaster should not be seen as an empty space, but as a blanking out (whether voluntary or not) of the event, which does not preclude a renewed remembering.

The final session of the second day assembled three papers on the topics of perception, reaction, and mitigation of disaster. **Yvonne Breuer** (Bonn) examined in her paper whether and in which Carolingian sources the weather was employed as an omen for further calamity or as divine retribution by God, either for human misdemeanor or as criticism of the actions of a particular ruler. She pointed to the particularities of working with medieval sources, in which the events described often did not literally happen, but are employed as topoi in a particular functional telling. **Jana Sprenger** (Göttingen) offered in her project insights into discourses on pest control as well as into zoological and ecological understanding in eighteenth and nineteenth century Brandenburg. Starting with the question "what was it in this period that made animals into vermin?," she compared data from agricultural and forestry sources in order to reveal the way that knowledge was transferred and communicated, and exposed the specific structures of interpretation of this form of relationship between humans and animals. **Rebecca Knapp's** (Bochum) paper on city fires during the early mod-

ern period – defined by her as a phenomenon on the interface of nature, disaster and culture – pointed out a close relationship between disastrous fires and contemporary discourses on risks and security. Unlike today, when the threat of urban conflagrations has to a large extent been tamed, early modern city fires were a constant hazard and had to be contained and governed by a multitude of "feuerpoliceyliche Maßnahmen" (fire policing measures) such as explicit urban fire orders or building codes.

The sixth and final panel took up the question "Climate Change as a Natural Hazard?", thereby linking back to the opening of the workshop. The dissertation project by Hieronymyus Bitschnau (Salzburg) is concerned with Vorarlberg and the region around Lake Constance, both hitherto unexamined by climate historians. His methodological approach was determined by wine-growing. Wine grapes are one of the most sensitive agricultural crops in terms of the climatic conditions they need, and thus function as a good indicator for regional climatic changes during the "Little Ice Age." Including the analysis of documentation on harvests and profits, this project goes beyond climatology and offers a perspective on an environmental history of viniculture. Katja Esser (Aachen) introduced the research she is working on as part of the project "City2020+" at the RWTH Aachen, which examines the connections between climate conditions, social and urban structures and the health of the local population in both the past, present and future. Her outline of an environmental history of Aachen in the nineteenth century revealed the tensions between the city's view of itself as a traditional spa town on the one hand and a growing industrial center on the other, and showed the city to be a confluence of a host of problematic environmental constellations.

At the end of this conference, which offered an impressive overview of themes, trends and perspectives in research into natural disasters, environment and climate in the humanities and social sciences, the interdisciplinary concepts of interpretation, perception and memory were once again center stage. The discussion centered around the question whether natural catastrophes were sudden, isolated, and quickly forgotten events. This view was countered by arguments that natural disasters are often the immediate catalysts for structural changes in terms of society's relationship with nature and risk evaluation. The influence of natural disasters, it was suggested, was less in the immediate consequences of the disaster itself or the reactions to it, than in the transformation of the socio-economic, mental and spatial-material context around it. Natural disasters are present not only in their concrete reality but also in the way that risks and vulnerabilities are perceived and in the form of new adaptive strategies based on past experience, such as insurance and technological protective measures. Great importance was accorded in this context to sequences of disasters.

At the end of the day, it was agreed upon that most natural disasters are indeed "extraordinary" events. At the same time, however, affected communities also must assume that they will strike again, that in a way the extraordinary can become ordinary – with only the moment and the intensity of the impact remaining uncertain. Following on from this, the exposition of changes and continuities in these processes and structures of appropriation was put forward as being one of the central ideas for future research. The challenge for environmental history and historical research into natural disasters, it was concluded, is to give new perspectives on and pose new questions about the relationship between nature and society, to break up accepted dichotomies and let this relationship tell its own story.

-- Felix Mauch