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Environmental Coherence: Investigating Relationships of Technology and Natural Disaster

With this proposal I wish to pursue the development and use of the concept *environmental coherence*. Different cultures have developed different forms and degrees of attachment to and knowledge about their environment, which I suggest to call *environmental coherence*. Cultures gain knowledge from environmental experience and develop practices to cope with and adapt to environmental conditions. On the other hand, cultures transform their environment in order to adapt it to cultural needs. A particularly useful approach in the study of *environmental coherence* is the investigation of cases of historical natural disaster. Cases of natural disaster in history provide insights into the relationship between cultures and their environment and the changes in that relationship that have occurred over time. Disasters can serve as a lens to analyze human interaction with technology and environment. Investigating natural disasters in a broader historical context offers a rich opportunity to enhance historical understanding not only of the disasters in question, but of the societies and cultures in which the disasters took place. Mikael Hård and Andrew Jamison have described the modern mind set as a narrowing of perspective. The rise of scientific and technological knowledge since the sixteenth and seventeenth century has encompassed a deprivation of the moral content of knowledge (Hård and Jamison 2005). Case studies on flood disasters, which I have studied earlier, suggest that it also encompassed a deprivation of *environmental coherence*. *Environmental coherence* was affected by scientific and technological change. Technological potency greatly increased the degree of interference in the environment. It enabled the creation of technological landscapes that led to a loosening of the connection between humans and the processes occurring in their environment. Likewise it caused a devaluation of non-scientific, local, and tacit environmental knowledge. Technology, however, is only part of the explanation. Sets of beliefs and mentalities provide another clue to understanding differences in *environmental coherence*. Stories, traditions, collective memories, and local experiences shaped environmental understanding.

At the Rachel Carson Center in Munich I wish to pursue the following research plans: First, I envisage writing a comprehensive article analyzing the *environmental coherence* of cultures on marginal lands based on the investigation of flood disasters from the thirteenth to the twentieth centuries. Second, I wish to prepare a theoretical article describing and analyzing the concept *environmental coherence*, its background, uses and limitations. Third, I wish to accomplish preparatory work for a book project to be based on a broad range of (disaster) cases since ancient times.