

Learning from the Past: Opportunities and Constraints

A meta-analysis of research on historical society-environmental stress interactions

The Hebrew University Center for Sustainability

Call for sustainability research - Preliminary research proposal

Principal Investigators:

Dr. Lee Mordechai, Department of History, Faculty of Humanities

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Research Areas of Principal Investigators:

Lee Mordechai specializes in environmental history and in particular premodern disasters. He has published on infectious diseases, earthquakes and flooding in premodern contexts, as well as developed theoretical frameworks that bridge the gap between premodern disasters and modern disaster studies. Lee's research also examines the social and cultural history of the Byzantine Empire between the sixth and thirteenth centuries.

Amit Tubi specializes in the contemporary human dimensions of environmental change, especially vulnerability and adaptation to climate change. His other research areas include the relationship between climatic fluctuations and conflict/cooperation, environmental migration, and the loss of social-cultural values arising from environmental change. Amit also conducts research in synoptic climatology - the analysis of large-scale weather patterns over time.

Motivation and purpose of the proposed research

In light of the threats posed by current and projected environmental changes, interest in the impacts of similar changes on past societies and their adaptation to these changes has increased dramatically. The main strength of this line of research lies in its ability to analyze ‘complete experiments’ of human-environment interactions. Such experiments can improve our understanding of present and future challenges by offering useful lessons to guide adaptation policies to contemporary environmental changes. However, current discussions on this topic have yet to systematically engage with two fundamental questions: First, what can we learn from history in the context of how past societies interacted with environmental stress? And more specifically, can we derive useful insights for the 21st century from studying the responses of past societies to environmental stress?

Innovation and contribution to the field of sustainability

The analysis of the human dimensions of environmental changes is a major theme in sustainability research. In recent years this literature has been shifting its focus from the prevention of change to adaptation to its inevitable consequences. Research on historical social interactions with environmental stress constitutes a major part of this shift. This research has drawn much attention in several scholarly and public fora. However, the lack of engagement with the fundamental questions surrounding learning from history in many of these discussions risks drawing erroneous or inapplicable insights while overlooking important lessons.

Our proposed study contributes a novel perspective to these discussions by investigating the often-underemphasized assumptions and sources of knowledge they draw upon. It therefore provides the basis for drawing more accurate past-present analogies and resulting policy recommendations. By synthesizing the debates and case studies of this research field, our research will derive important insights for improving the present-day sustainability of socio-environmental systems. Looking forward, the proposed study is the first step in a broader research program that will set this discussion in a new and more robust trajectory.

Research method and collaboration between the researchers

To take the first step to address the questions mentioned above, **we propose to conduct a meta-analysis of the interdisciplinary literature on historical society-environmental stress interactions.** As a foundation of our broader multi-track research program, this meta-analysis will examine papers published in high-impact journals and seminal books. This literature serves as the main point of interface between academic research of all disciplines, and therefore shapes public discussions and informs their resulting policies. The immediate subsequent steps in our broader plan include (1) enlarging our research group to include a natural scientist and an archaeologist and (2) investigating the relevance of historical insights for various stakeholders such as planners and decision makers.

Both of the applicants are early-career researchers. The proposed project creates synergy between their different fields of expertise. Amit brings to this collaboration his expertise in societal adaptation to climate change and his knowledge in climatology as well as his experience with the practicalities of conducting a meta-analysis and mentoring students. Lee contributes his expertise in premodern history, as well as his skills in close reading and analyzing discourse. Together, we aim to investigate how contemporary research in the social sciences, the humanities and the natural sciences examines the interactions between environmental processes and past societies.