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Seeing the Environment through the Humanities

A New Window on Grand Societal Challenges

Marcus Hall, Philippe Forêt, Christoph Kueffer, Alison Pouliot, Caroline Wiedmer The Environmental Humanities draw from insights of the human and natural sciences for proposing new concepts and solutions to society's pressing environmental problems.



Seeing the Environment through the Humanities. A New Window on Grand Societal Challenges | *GAIA* 24/2 (2015): 134–136 **Keywords:** environmental humanities, grand societal challenges, metadiscipline, science and society, Switzerland

Environmental Humanities: New Energy for an Old Idea

In June 1955, zoologist Marston Bates summarized a major interdisciplinary conference at Princeton University entitled Man's Role in Changing the Face of the Earth. 70 participants from all continents had been invited to draw from their collective expertise to outline a better understanding of the human place in the natural world. "The sciences and the humanities form a false dichotomy," Bates declared, "because science is one of the humanities. (...) If science itself is to survive, it looks as though we shall have to find some way of 'humanizing' it" (Bates 1956). Having spent many years in Colombia researching links between mosquito ecology, yellow fever and malaria,

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Bates knew the crucial importance of combining various pursuits of knowledge.

60 years later, the new field of environmental humanities (EH) is answering Bates' plea to incorporate science within the humanities, while aiming to "humanize" it by combining insights from many different fields (Nye et al. 2013, Forêt et al. 2014). Environmental knowledge comes in many forms, with ecological, geological, and climatological understandings being forged alongside those that are historical, political, philosophical, ethical, literary, and artistic. The purpose of EH is to devise and implement an inclusive, ethical, sustainable, and equitable relationship with our planet (Forêt et al. 2014).

Our goal in this paper is to show how the humanities can offer fundamental, applied, and immediate solutions to environmental problems. We begin by describing the state of EH in Switzerland, then suggest ways to strengthen this metadiscipline, before outlining four projects that illustrate the potential of the field. To conclude, we highlight the importance of integrated knowledge, while clarifying the scope of environmental problems.

The State of EH in Switzerland

EH are playing a small but growing role in fostering interdisciplinary research in Swit-

zerland. To assess the state of EH research, teaching, and outreach activities in this country, we carried out a survey with the support of the Swiss Academy of Humanities and Social Sciences (SAHS). Our report was designed to complement a recent worldwide survey of EH (Nye et al. 2013). The research activities in Swiss EH include a wide range of topics, from conservation and climate change to political ecology and eco-criticism. Swiss universities offer a variety of environmental courses taught by social scientists and humanists, but mostly in programs of environmental sciences, sustainability studies, and geography rather than in faculties of the humanities (Kueffer et al. 2015).

Our June 2014 workshop reiterated that research topics, outreach activities, and institutional support in EH are crucial for understanding the human dimension of environmental problems and human-environment interactions. A typical statement was: "Generally, any major environmental issue must be considered from humanistic perspectives, especially in combination with insights from the sciences." Perceptions, representations of environmental issues, environmental values, ethics and justice, participatory processes, and societal transformations were among the specific topics of interest to workshop participants.

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Within the humanities and social sciences, a critical mass of academics is urgently needed to strengthen identity and collaborations, contribute to institutional and personal capacity, tackle the complexity of environmental problems through large projects, take advantage of synergies in research and teaching (especially across disciplines and institutions), and increase the visibility and support of EH within academia and society (including the business world).

As a result of the survey and workshop, we developed a ten-point proposal for implementing EH in Switzerland (see box).

Addressing Grand Societal Challenges: Four Questions for Environmental Humanists

New EH initiatives are developing across Switzerland. To attract more attention and resources, tangible results of EH research and teaching must be made visible to society. Below we highlight four projects that show how EH can improve human health, reveal migration ecology, devise sensitive visual messages, or increase awareness of our civilization's fragility.

Do Healthier Ecosystems Make Healthier People?

Today one rarely hears of "malariology," which at its peak in the 1950s was a field investigating malaria from the simultaneous perspectives of epidemiology, internal medicine, entomology, sociology, and political science. Then the magic bullet of DDT put an end to the holistic study of how a diseased environment (bad air, or mal aria) produced a major human disease. And not until mosquitoes became DDT-resistant, and DDT's ecological damages became more obvious, would this pesticide be removed from the malaria-fighter's toolkit. Yet with malaria today still killing at least a half-million people annually, there is a dire necessity to return to questions about how health has been manifested in bodies and ecosystems, and how a retrospective view of early disease-prevention campaigns can still provide answers. For example, malariology's decline and fall underlines the danger of relying on single solutions to complex envionmental health problems. Even if a historical turn reveals earlier malaria

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Proposal for Implementing the Environmental Humanities (EH) in Switzerland

- 1. Establish social scientists and humanists as leaders in environmental research.
- Strengthen integrative and cooperative research in humanities, social sciences, and natural sciences.
- 3. Open a laboratory for "humanities in transformation".
- 4. Acknowledge and value Swiss academic diversity by region and language.
- 5. Cultivate closer links between humanities and natural sciences.
- 6. Develop outreach activities useful for international decision-makers.
- 7. Create a new national platform for EH.
- 8. Foster international networking in EH.
- 9. Increase EH course offerings, from pre-university to post-graduate.
- 10. Continue developing multidisciplinary methodologies tailored to EH's strengths.

Source: Kueffer et al. (2015), pp. 19-21

treatments to be ineffective today, we can still appreciate and emulate earlier investigator's meticulous field work and their dedication, while also being weary of hastily tested remedies implemented with imperial zeal (Hall 2010).

How Does Migration Change Social and Environmental Relationships?

A good reason for situating a cultural studies project within EH is the opportunity to reframe cultural practices in the broader environmental context.

In our project on forced migration, we see how the flow of people across borders produces social as well as political upheaval along with physical change. Our focus on the ecology of mobility pays attention to porousness and exchange. What happens, for instance, to the social fabric of war-torn countries whose inhabitants are forced to flee? How do refugees work through trauma and re-build social networks in host countries, and how do these new social networks in turn influence the physical structure of their new home? What becomes of neighborhoods in which migrant communities import elements of their own relationships with nature?

Envisioning migration as an environmental phenomenon helps dissolve the facile dichotomies opposing human and nature, the social and environmental. This means understanding how the legal, the social, the material, and the spatial mediate the experiences of a country's immigrants and residents that go beyond the typical axes of integration and rejection, assimilation and prejudice (Wiedmer 2012).

How Can Visuals Portray Abstract Environmental Concepts?

EH explore how knowledge is produced and disseminated, and how environmental issues are perceived and understood. Visual media assist in communicating environmental concepts across disciplines and epistemologies, as well as bridging academia and public intellectual life. Film, still imagery, simulations, graphics, and cartography can help translate ambiguous and abstract theoretical constructions such as sustainability, biodiversity, and conservation, bringing them into mediated presence. There are distinct challenges in visually portraying environmental issues in an image-saturated world that dwells on the photogenic and instantaneous, rather than on the often slow and attritional invisibility of environmental degradation (Nixon 2011) (see figure, p. 136). Visualizing environmental issues also carries a responsibility that goes beyond simply illustrating a narrative or capturing a situation, and opens up opportunities for emotional connections. Opportunities to not only rethink environmental ideas, but to re-experience them, perhaps by evoking an environmental consciousness or imagination, may promote empathy or understanding. In linking objectivity with sensuality, multiple media can stimulate action and promote societal change (Miles 2010).

Why Do We Ignore Predictions of Collapse?

Are we intellectually ready to contemplate the obvious – that human systems may fail? For a century now, our society has pro136



FIGURE: Risk scenarios: can we portray environmental issues in ways that make us feel the slow and attritional invisibility of degradation?

duced books such as *Civilization and Climate* (Huntington 1915), *Collapse: How Societies Choose to Fail or Succeed* (Diamond 2005) or *The Collapse of Western Civilization* (Oreskes and Conway 2014, see Mauelshagen 2015, in this issue) whose foregone conclusions point to inevitable global collapse.

Meanwhile, a number of other scholars have carefully tiptoed around the topic of collapse, and devoted their attention to impact, adaptation, mitigation, as well as the search for a consensus. The *Fifth Assessment Report* of the Intergovernmental Panel on Climate Change¹ (IPCC) has revealed our inability to move beyond metaphors such as "sustainable development" and even "humanizing the sciences". These rejections of collapse point to an odd disjuncture between knowledge, understanding, and public policy.

Our projects have examined the archives of pre-modern Zurich and Guangzhou, and the ruins of the fabulous kingdom of Loulan, in order to look at how society once responded to crises, uncertainty, and vulnerability. New concepts are required to understand past creativity as well as present passivity. For instance, hysteresis explains why we continue ignoring the rapid rise of the seas, as if we had decided that this issue will be better solved by the descendants of the survivors (Forêt 2013).

Integrating Knowledge for Circumscribing "Environment"

The questions above demonstrate that "the environment" is indeed a malleable term: from the physical to the epistemic, from the visual to the social, the term circles different contexts that shape human beliefs, values, and actions. That these contexts should be foregrounded in EH arises from the realization that we must attend to the human agent who is, after all, inextricably entangled with the natural world. With the growth of EH, we are learning how to do more than adding dimensions and complexities to the current framing of grand societal challenges. The EH fundamentally reframe how we understand our role in changing the face of the earth. Discovering new and promising angles to address such changes will require that disparate disciplines work together, build on each other's expertise, and strive for integrative understandings of the environment. Such integration will provide new knowledge, and more crucially will modify how we learn and share. The IPCC has built a model of expertise to systematically assess global issues: could the EH form a similar network?

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