

# Environmental Justice, 'Collapse' and the Question of Evidence

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## INTRODUCTION

The papers assembled here represent the culmination of a recent workshop hosted at Franklin University Switzerland entitled Environmental Justice, ‘Collapse’ and the Question of Evidence. The interdisciplinary parameters for the workshop allowed us to include a broad range of contributions from the humanities, the social sciences and the natural sciences with the explicit goal of establishing potential overlaps between environmental justice and notions of collapse. The workshop aimed to explore the many forms of evidence that surface as scholars and scientists go about making claims on behalf of both justice and collapse. Most importantly, the workshop served to highlight what thinking across disciplinary lines could yield as it becomes increasingly obvious that single disciplines like politics, law or even science have failed to find the kinds of solutions we need to ward off disaster. During the workshop, several participants asked specifically what constitutes evidence for imminent collapse and how that evidence is produced for analysis. Others pointed to the enduring need to redress the profound inequities that surround environmental hazards and destruction in an effort to provide potential solutions to this complex set of questions.

A return to the literature reveals broad consensus that our societies are standing on the brink of various collapses. While the environmental justice literature has emphasized the implications and critical nature of climate change (Bryne and Portanger, 2014; Mohai, Pellow, & Roberts, 2009; Schlosberg 2013), climate catastrophes represent just one of many potential collapses that we currently face (Motescharrei, Rivas, & Kalnay, 2014; Turner, 2012). Further, insight into these collapses and the environmental justice issues that they engender comes from many disciplinary directions. The literary scholar Robert Nixon examines threats and changes to the environment which are difficult to discern, a phenomenon he terms “slow violence”: the gradual and often invisible changes in the environment wrought by events such as toxic drift, oil spills, and the environmental aftermath of war (Nixon, 2013). This slow violence, Nixon argues, is often overlooked amidst the more sensational spectacles of erupting volcanoes and massive hurricanes, which determine how we receive narratives that allow us to see and interpret the environment; and this oversight exacerbates the vulnerability of ecosystems and of the poor. From an economic perspective, Naomi Klein’s latest book *This Changes Everything* marshals evidence to show that a massive reduction of greenhouse gases will simultaneously reduce inequalities while addressing crumbling local economies (Klein, 2014). Geographer Gordon Walker, author of *Environmental Justice: Concepts, Evidence and Politics*, has written extensively on how notions of justice and evidence are framed within different discourses (Walker, 2012) and political scientist John Barry writes about the relationship between moral, political theory and the environment, with particular focus on ecofeminism, the implications of green theory for thinking about justice, and theories of political economy in relation to the environment (Barry, 2005; Barry and Farrell, 2012).

Not surprisingly, legal scholarship has also brought forth an important body of work on the conceptualization of justice and evidence. David Schlosberg (with his co-authors), for instance, has written extensively on the concept of justice in the history of the environmental justice movement and on the necessity of basing ideas of justice on notions of capabilities, participation, and recognition (Schlosberg, Zavestoski, & Shulman, 2009; also, Schlosberg, 2013). Jody Freeman and Michael Gerrard trace the efficacy of international climate control systems, such as the Kyoto Protocol, as well as legal systems at the state, national, and international levels designed to require public entities to mitigate their impact on climate change (Freeman and Gerrard, 2015). Additionally, Richard J. Lazarus analyses the gaps in implementation and coverage of environmental law with a focus on the legal, political, cultural, and scientific factors that have shaped—and sometimes

hindered—the creation of effective pollution control (Lazarus, 2011, Lazarus and Houck, 2005). In Europe, Michael Kloepfer has published a book in which he examines the usefulness of the mainly Anglo-American discussion surrounding environmental justice for German law (Kloepfer, 2006).

As a number of scholars and scientists have remarked, discussions of environmental justice have arrived much later in Europe (Kraemer, 2007; Laurent, 2011; Preisendörfer, 2014). These scholars note that environmental justice issues appear to fall more across social categories and immigration status in Europe compared to the strong racial and ethnic divides that characterize environmental justice in the United States. The ongoing refugee crisis will likely only exacerbate this divide in Europe. Thus, the European context represents a rich area of research with diverse and divergent experiences with environmental injustice and justice. Understanding, for example, how environmental burdens may or may not interact with the challenging integration of immigrant cultures into European countries presents an emergent field of research. The Middle Eastern and Asian contexts, in the meantime, present entirely different parameters in which to investigate environmental justice that emphasize, among other things, the effects of war and industrialization.

We see this volume as the opportunity to continue a critical conversation that transcends national and disciplinary borders and invites a fruitful dialogue among diverse actors from different fields and geographic contexts. In this spirit, we open this issue with a conversation between natural scientist Christoph Kueffer and artist Jillian Scott. Their exchange focuses on radically interdisciplinary approaches to evidence and collapse, highlighting the activist role of the arts in environmental problem solving. They also juxtapose notions of scientific objectivity and artistic subjectivity in an effort to call artists into the laboratory, and perhaps more daringly, scientists into the art world, and into the realm of subjectivity. Their interdisciplinary and multidisciplinary lenses help us reframe and rethink complex and pressing problems of justice and injustice, of different ways of thinking evidence, of public awareness, and subsequent public response.

Jillian Scott suggests that film is one way to raise public awareness via the artistic sphere, and video essayist Ursula Biemann does precisely that. Biemann's contribution speaks to her video essay *Deep Weather* (2013) and how the interdisciplinary nature of the evidence associated with collapse remains critical. In particular, Biemann uses her video essay to align diverse but intersecting local ecologies on the larger, planetary scale. We see the convergence of the geopolitical, the ecological, and a series of activist narratives that frame stark examples of the evidence of collapse.

Alison Pouliot's contribution, "A Meander in the Mycosphere," addresses the specific challenge that Kueffer and Scott lay out to scientists, asking them to consider the realm of the subjective. She proposes a multi-sensory approach to the understanding of collapse, inviting us to leave the confines of the classroom in favor of a foray into the natural world. The photos and images her essay provide bring us to the fundamental question that she and other workshop participants ask: how can evidence be experienced, narrated and represented in ways that transcend disciplines and existing frameworks of knowledge?

In their paper, "In Everybody's Backyard? Examining the Intersection of Invasive Alien Species and Environmental Justice," Brack Hale and Patrick Della Croce show that environmental justice serves to highlight the social and cultural dimensions of environmental problems that are often framed mainly as a problem of natural systems for natural scientists. Hale and Della Croce thus bring ecological discourse into the socio-cultural realm, emphasizing the potential consequences across

disciplines of the value-laden terminology that characterizes our discussions of invasive alien species (IAS). Further, they remind us of the evidence that the IAS provide for the evaluation and subsequent policies or action to be taken in areas of species containment and public health.

Michael Egan brings a new voice and another discipline, the history of science, to the conversation with his article, “Confronting Collapse: Environmental Science at the End of the World.” Egan coins the term survival science as an “organizing tool to bring together various labels and to stress the social significance of survival as a new environmental imperative.” He crosses historical and disciplinary boundaries in an effort to show that discourses about collapse and the evidence that we attribute to that collapse have been swirling around our discussions of the environment for more than fifty years. As Egan eloquently points out, the way in which we measure health risks and other hazards share no clear and objective methodology, but instead are embedded in a series of cultural and socio-economic conditions that affect how the scientific community measures evidence. Indeed, his work suggests that the inherent subjectivity necessary for this analysis creates a challenge for perceived scientific objectivity.

Kimberly Ruffin’s essay, “Biophilia on Purpose: A Declaration to Become an Ecosocial Citizen,” returns to the origins of the environmental justice movement, demarcating inequalities of race. She uses the notion of self-certified biophilia to highlight the oppressed community’s “ability to affirm their humanity and engage with the rest of the natural world outside of social systems that denied their humanness.” Through biophilia, this same community confirms its ecosocial citizenship, thus restoring its humanity in the process. Ruffin’s article responds to Philippe Forêt’s workshop presentation on the world’s super elite in order to take her analysis in a new direction. She fruitfully compares the situation of the disenfranchised to case of the ultra-wealthy, who can shop for passports in any nation state willing to sell citizenship to the highest bidder. Ultimately, she concludes that even those with ample amounts of economic capital will be unable to protect themselves from ecological and environmental collapse, suggesting that ecosocial citizenship, which elides race and social class, may indeed be the only way forward.

Marco Armiero’s contribution, “Of the Titanic, the Bounty, and Other Shipwrecks,” picks up where Ruffin leaves off, using class as a marker in examples of collapse throughout history and literature. Armiero suggests that stories of Noah, environmental cataclysm, and the Ark have conditioned our proclivity towards the shipwreck metaphor and the apocalypse. He then quotes Rob Nixon, reminding us that while we may be all in the Anthropocene, we are not all in it in the same way (Nixon, 2014). His reading of the Titanic and the Bounty narratives serve to highlight the enduring inequities that characterize disaster and our response to it. Further, Armiero’s salient analysis of social class points to how those of the lower classes are disproportionately affected by issues of environmental collapse.

The articles collected here thus forge new paths in thinking about ways in which evidence and environmental justice are determined by race and class as well as epistemological and geographical boundaries. This volume and the contributions included herein strive to change the scripts of environmental justice and collapse. By examining the evidence we use and omit, by expanding the catalogue of evidence we allow to inform scholarly and public discussions, we seek to inform and perhaps reshape the discourse about these important issues. We argue that these multiple and diverse perspectives contribute to creating a clearer path to workable solutions. Finally, by reframing

our own perspectives and subjectivities, we may find a way to marshal evidence that cuts across traditional understandings and stems (further) collapse.

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