Introduction

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As with any edited collection, when planning *the Cambridge Handbook of Environmental Sociology* we imagined who would be using the text, and when they would be using it. We considered a researcher, starting on a new project and looking for approaches to better understand a complex environmental problem; a student, having been exposed to environmental sociology, excited by some ideas and looking to become better oriented with the field; a teacher, looking for readings to assign to students in the upcoming semester; or a practitioner, whose interest lies somewhere in that liminal space straddling town and gown. We thought of the purpose of handbooks, in a world where a quick search on the Internet can generate an article to answer any question, and sometimes an article to seemingly support just about any belief. In this context, a handbook can act as a reliable reference point that includes a broad, but not boundless, survey of ideas and a quick, but not superficial, snapshot of some of the empirical work that supports and elaborates those ideas. A handbook should provide some grounding and some coherence in what can feel like a world of shaky information. It should support the kind of depth and rigor that can come from physical, textual interactions, and contribute to a sense of intellectual continuity and community as part of the enduring work of universities.

Environmental sociologists can play a strong role in contemporary public life, and we often find ourselves feeling obliged to do so. The worst effects of climate change loom heavily on the horizon, while deforestation and energy use seem to only accelerate, and the worst effects compile most strongly on the least advantaged. At the same time, political debates and growing populism internationally seem to often carry a distinct environmental flavor. Debates over the use of public funds for environmental protection and energy transitions, or over reduced access to resources for conservation purposes, have reinvigorated old divisions between economic and ecological wellbeing. These are not new: they align with some of the earliest work in environmental sociology that discussed how our economic paradigms became incompatible with, and even hostile to, more environmentally focused paradigms (see Catton and Dunlap 1978). Political economy approaches, like the "treadmill of production" (Schnaiberg 1980; Gould, Pellow, and Schnaiberg 2015), further illustrate how our economic system is dependent on the increased exploitation the environment. The inherent, capitalist pressures to expand production and consumption and to reduce costs are linked to environmental degradation through the search for cheaper, more accessible resources and easier ways to dispose of increasing

waste, with little regard to issues of inequality. This exploitative economic model being enacted is not the only approach our society can take, and many environmental sociologists have focused their careers trying to dislodge it and shift political discourses that are grounded in its assumed inevitability. Clearly the economy, in a holistic sense, suffers with ecological collapse and rampant environmental injustice.

Politicians advocating for the pursuit of economic growth through the relaxing of environmental and labor regulations, and thus reinforcing these assumed dichotomies, is not novel, and yet the deployment of this logic in new contexts contains new dynamics and new implications. Better understanding historical patterns and their distinct operation in our current setting is an important task for us. For example, social media increasingly plays a forceful role in shaping the circulation of ideas and information, and can be seen to spur populism by spreading dubious information and supporting it in an echo chamber (Groshek and Koc-Michalska 2017). Social media can also be a powerful force in social movements, bringing masses of diverse people together around environmental issues (see Steinhardt and Wu 2016). The growth of social media as a dominant form of communication can be seen broadly to influence inter-generational social and political dynamics while also connecting people quickly over significant geographical spaces. Social media is just one of the many factors that has changed the world in which policy debates about the environment occur.

We embrace the continuity we see in the subjects we pursue, and we also recognize the disjuncture and the need for work firmly situated within those new contexts, able to consider their unique contemporary characters. After all, discontinuity and disjuncture are, in many ways, characteristics of contemporary social and environmental life: where the rate of environmental change and extent of environmental injustice challenges our ability to adapt (see Barnett et al. 2015), we are facing an increasing rate of species extinction (Ceballos et al. 2015), and we see high rates of mass global migration as a result of conflict, but also increasingly as a result of environmental change (Mortreaux and Barnett 2009). In their article in *Nature*, Black et al. (2011) suggest that migration from climate change can provide opportunities, and that reluctance to move can generate the greatest suffering in relation to climate change. We hear similar comments in response to hurricanes: those that suffered the most were those that stayed rather than leaving their homes. Change – the embrace of change, and the normalization of significant continuous change – is a defining feature of our era. Yet, the meaningful change we want to see toward environmental reform and justice, and away from unfettered economic growth, can sometimes seem beyond our capacity, and this is certainly true if we're looking at an individual level.

It is perhaps this feeling of discontinuity and disjuncture that also compels us to try to build broad and diverse coalitions across our field, and outside our field. We do this particularly in the context of an academic space that is also shifting. The neoliberal influences on universities have led many institutions to be run like businesses, with academic work becoming more precarious. These changes pose a number of challenges for our work: funding for research is increasingly dependent on investment from private businesses, exerting pressure on us to make our work palatable to the

private sector's aims and logics; we must produce work that is measurable according to the metrics of our institutions, so that we are encouraged to prioritize rapid academic publications over other types of slow and engaged forms of scholarship (Berg et al. 2016; Ball 2012); and, the changes in university staffing and university priorities can make it challenging to maintain enduring, meaningful connections with communities outside the university (Brackmann 2015). These connections are particularly important given the work we do in environmental sociology: we learn about society, but we also participate in it and hope that our work can lead to a better future. Developing and maintaining strong relationships with people outside of the university is necessary if we are to be relevant and meaningful.

A handbook is also a device for disciplines, which are changing. Universities seem to be constantly shifting to more businesslike forms of organization, where degrees are being designed to cater to the labor market, rather than a coherent disciplinary foundation, and departments are being managed in ways that better align with these degrees. In this context, handbooks are playing a role in reproducing the idea of a *discipline*. This can sometimes be a way to draw boundaries around a field and thus further valorize a limited set of founding figures. Alternatively, disciplines can also be a powerful way to create a sense of continuity and support through an intellectual community; a way to bring together without disciplining out heterogeneity and the willingness to experiment.

We use the term "discipline" to recognize a community of environmental sociologists, drawn together by interests in phenomena occurring at the intersection of society and the environment. We also share some general conceptual foundations, and tend to have an underlying commitment to questions around social and ecological justice. And yet, while we may share some foundations, and may steer our ship toward some similar kinds of beacons, it would be a disservice to many of our colleagues to draw thick disciplinary boundaries, or ignore the vibrant evolution of ideas that has proliferated over the past fifty years. Indeed, there may be more diversity of ships and beacons within those who identify as environmental sociologists then overall differences with allied environmental humanities and social sciences, such as political ecology, environmental anthropology, science and technology studies, environmental history, ecological economics, environmental philosophy, and food studies. We do not use the word discipline to reproduce a strong artificial boundary around what may be considered environmental sociology, or to insist on rigorous adherence to a foundational canon. To do so would implicitly exclude a lot of brilliant work being done by those we consider part of our community.

Rather, we envision the notion of a discipline more in the sense of careful, committed conversation about common concerns, than in the sense of boundaries around participation in that conversation. Instead, the idea of a discipline can be a way of imagining a community at a collective level, and which welcomes those "environmental borderlands" (Zimmerer 2007) that often defy conventional disciplinary classifications. Conceptualizing the "discipline" as careful, committed conversation allows us to be reflexive about the work we are doing, our role in our communities, and the hopes we have about our work in the future. Along these lines,

developing this Handbook was an exercise in both trying to recognize some important currents in environmental sociology broadly, but also thinking about how to participate in the discipline through a handbook. We wanted to have chapters that reflected major traditions in environmental sociology and a strong and clear sociological grounding, but we also wanted chapters that illustrated a creative breadth of work. We also wanted to include authors who were writing from a range of different places about those places, who were at different career levels, and those who had some ways of approaching environmental sociology from different angles.

Textbook editors have a particular snapshot of a topic or area, and this influences the book they put together. We had four editors, but we are all from a predominantly North American academic tradition and English speaking. We knew this would limit what we know of environmental sociology. In preparing the text proposal, we explored some areas of research that we had not encountered before and became familiar with new bodies of work. We were also fortunate in that many of the contributing authors, and many of our colleagues, gave us suggestions about people to include. We tried to balance what we knew with an exploration of the field, which, while not exhaustive, led us to some exciting corners and edges.

In keeping with our view of the environmental sociological project as careful, committed conversation, a lot of the authors included in the Handbook are not, in the bounded sense of a discipline, environmental sociologists. And yet, they are part of a shared community as their foundations, approaches, and methods so strongly align with what it means to *do* environmental sociology that we would be remiss to exclude their work. In other cases, we can see how other disciplines may pointedly speak to particular problematics in environmental sociology, and felt it valuable to bring that work explicitly into this conversation. Environmental concerns are necessarily interdisciplinary, but that doesn't mean being anti-disciplines. To be interdisciplinary, and even transdisciplinary, there have to be disciplines to integrate. What we are against is the bounded sense of discipline that prevents connecting our conversations. The challenges we face as humans on a struggling planet require a collective effort. Building a strong community within our discipline in a shifting academic landscape, and building coalitions outside our discipline with those who share our concern for the future and our commitment to a better one, is not just enjoyable as it has been in developing this Handbook, but it is absolutely necessary.

Conceptualizing and Practicing Environmental Sociology

The Handbook is divided into two volumes: one focuses on conceptualizing environmental sociology, and the other on practicing environmental sociology. Of course, drawing some kind of boundary between more conceptual work and more practical work is fraught, and many of the chapters included in the conceptual volume are quite practical, and vice versa. Regardless, we chose to make this rough distinction for organizational purposes, and include chapters that were tackling conceptual issues more directly in the first volume, covering the broad areas of theory, economy, culture, politics, and justice. In the second volume, we included

chapters that focused on a particular substantive area of environmental sociology, a particular subfield, or a particular kind of environmental problem. This volume includes sections on methods, embodiment, research beyond-the-human, sustainability, natural resources, food and agriculture, and social movements.

The first volume begins by tackling foundational concerns of the field, tracing and challenging environmental sociology's emergence in relation to classical social theory (Holleman, Chapter 1) and centering globalization and the need for a globalized approach (Lidskog and Lockie, Chapter 2). New theoretical directions are found in the reformulation of nature/"nature" in connection with labor and sex-gender (Salleh, Chapter 3), and in relation to the divine and the human and the material and ideological conflict of bourgeois and pagan (Bell, Chapter 4). Another promising theoretical avenue is the burgeoning scholarship on environmental micro-sociology (Brewster and Puddephatt, Chapter 5).

Part II brings together theories of the economy and environmental sociology, emphasizing again the importance of critical materialist frameworks (Longo and York, Chapter 6) and ecosocialism specifically (Löwy, Chapter 9), as well as a call to "emplace" sustainability (Barron, Chapter 11). The substantive issues addressed in this section include analyses of "green economies" (Li and Green, Chapter 7; Bresnihan, Chapter 8), community economies (Barron, Chapter 11), as well as the commons and "communing" practices (García-López, Chapter 10) as possibilities for contesting and transforming the capitalist economy.

In Part III, the theme of culture unites topics as disparate as media and environmental activism (Hannigan, Chapter 12), colonialism and parks (Ramutsindela, Chapter 13), nature-based tourism and environmental philosophy (Zhang, Higham, & Albrecht, Chapter 16), outer space as environment (Ormrod, Chapter 15), as well as "futuring" and transition pathways (White and Roberts, Chapter 14).

In Part IV, authors focus squarely on politics, power, and the state. Whether through development, enclosure, or restoration, the heavy hand of the state in land management is made clear in John Zinda's chapter, as he makes a case for the transfer of knowledge between political ecologists and environmental sociologists (Chapter 19). Cock identifies contested "environmental imaginaries" in the fight over land rights in South Africa, arguing for indigenous frameworks that challenge the state's view of nature as commodity (Chapter 17). Campbell's chapter examines the emergence of the audit culture, the mechanisms responsible for the eco-labeling of goods, identifying a new form of governance in this recent phenomenon (Chapter 18). Michael A. Long, Michael J. Lynch, and Paul B. Stretesky cover the area of green criminology, arguing for uniting the treadmill of production approach with ecological Marxism to further understand environmental problems (Chapter 20). Philip Macnaghten (Chapter 21) discusses the role of governance in shaping the practices and outcomes of science, outlining four different governance models including a co-production model, and suggesting that this may be applied through a responsible research and innovation framework. Noah Feinstein (Chapter 22) delves into the relationship between public knowledge and democracy, and proposes some solutions to the enduring challenges around the development and exercise of public knowledge for decision making. Lastly, Hale and Carolan consider how equity and diversity can

contribute to an understanding of relational resilience, and explore relational resilience through an analysis of two food cooperatives (Chapter 23).

In Part V, the authors bring social justice to the forefront. David N. Pellow (Chapter 24) expands traditional understandings of environmental justice (EJ) through examining four pillars of "Critical EJ Studies." Henri Acselrad (Chapter 25) discusses the struggle for environmental justice in Brazil, while John C. Canfield, Jr., Karl Galloway, and Loka Ashwood (Chapter 26) consider challenges to environmental justice in rural communities in the USA. Leslie King (Chapter 27) traces the relationship between capitalism and socioecological harm, highlighting corporate power and signaling opportunities for disrupting this control to work toward environmental justice. Phillip Warsaw (Chapter 28), looks at environmental inequality from the perspective of environmental economics, through a critical approach to neoclassical economics.

In the second volume, focusing on practicing environmental sociology, we start with some new epistemological and methodological insights particular to the field of environmental sociology. Martha McMahon and Chelsea Power (Chapter 1) explore the tensions and potential intersections between more-than-human approaches and strong sociological traditions attending to power structures. Steven E. Daniels and Gregg B. Walker outline the epistemological foundations of discourse intensive approaches (Chapter 2), while Randy Stoecker describes the history, aims, and challenges associated with community-based research (Chapter 3), and Katherine J. Curtis and Rachel A. Rosenfeld elaborate on the strategies and benefits of drawing from spatial data in conducting social research (Chapter 4).

In the second section of the second volume, we focus on embodied work in environmental sociology, focusing on sexuality and gender, as well as health and wellbeing. These chapters are connected in the ways that the environment shapes social wellbeing through its relationship with our bodies. Julie C. Keller (Chapter 5) discusses the discursive exclusion of queer people from an imagination of rurality, along with the rich history of queer rural social movements and spaces. Kathryn Gregory Anderson considers how masculinities are constructed with and through the environment, and how particular kinds of masculinities can be hostile to the environment (Chapter 6). Jennifer S. Carrera and Phil Brown (Chapter 7) discuss the role of sociology in bringing a structural analysis to work on public health, while Manuel Vallée (Chapter 8) describes how the environment gets excluded from popular accounts of health issues.

In Part III, we look at the role of non-humans in environmental sociology, focusing particularly on plants and animals. Katharine Legun and Abbi Virens (Chapter 9) describe the interventions offered by more-than-human approaches, and discuss what it can offer environmental sociology. Michael Marder (Chapter 10) considers our limited philosophical understanding of plants, and describes how a better philosophy of plants might open up radical new ways of thinking. In Margo DeMello's chapter focusing on human–animal studies, she describes the field's growth as well as the methodological value of multispecies ethnography (Chapter 11).

We focus on sustainability and climate change in Part IV, beginning with a look at the burgeoning area of degrowth through the work of Valérie Fournier (Chapter 12).

Emily Huddart Kennedy takes us through inequalities and sustainable consumption (Chapter 13), and Janet Stephenson discusses the relationship between culture and sustainable outcomes (Chapter 14). The remaining three chapters deal with questions of governance and sustainability or climate change. John Chung-En Liu and Mark Cooper (Chapter 16) consider the challenges and limitations to carbon markets as a method of international environmental governance. Bianca Ambrose-Oji considers the practice of community governance of forestry in the UK (Chapter 15), while Leila da Costa Ferreira tackles multi-level governance in Brazil, considering how action around climate change scales up from the city, to state, to federal level (Chapter 17).

The section on resources, Part V of volume two, covers water, petroleum, as well as the role of genomics and adaptive co-management in conservation and the management of resources. Daniel Jaffee discusses the privatization of water resources (Chapter 18), while Debra J. Davidson discusses the politics around hydraulic fracking for petroleum and the silencing of dissent (Chapter 19). Valerie Berseth and Ralph Matthews discuss how the application of genomics is changing the way we understand the natural world (Chapter 20). Nathan Young explores the challenges and opportunities of adaptive co-management structures which aim to involve communities in the management of natural resources (Chapter 21).

The penultimate section of the handbook, Part IV, covers food and agriculture. Michael Carolan discusses the development and adoption of precision tools and big data in agriculture (Chapter 22). Josée Johnston and Anelyse Weiler consider whether the food system can be changed through changing consumption patterns (Chapter 23). Geoffrey Lawrence and Kiah Smith look at the effects of neoliberal globalization on the food system (Chapter 24), and Paul V. Stock considers environmental morality from an agri-food approach (Chapter 25).

The last section of the two volumes, Part VII, is meant to offer some critical but insightful, and potentially even inspiring, thoughts on how to achieve a more just and beneficial approach to the environment. The section on social movements includes a chapter by Chelsea Schelly who describes different kinds of technologies and their social implications, and how alternative technologies can lead to more emancipatory practices (Chapter 26). Elizabeth A. Bennett outlines recent developments in the fair trade movement, and considers how the movement can best develop in the future (Chapter 27). Barbara Muraca (Chapter 28) extends a discussion of degrowth, elaborating on the history of the movement, its contemporary relevance, and its possibilities for radical transformation. Lastly, Pearly Wong outlines what lessons can be learned from environmental justice movements of the global South (Chapter 29).

Over the course of the text, we see some similar themes popping up, and some notable absences, which we outline in our conclusion (Chapter 30). It was challenging to decide where chapters should fit, and what would make a coherent, or at least sensible, section. We spent considerable time shifting chapters around and renaming sections, and mulling over whether, for example, it made sense to have a more-than-human section given the extent to which so many chapters touch on more-than-human approaches. We ultimately decided to break up a section on science and

technology studies (STS) for this very reason – it was simply too difficult to see what chapters to include and which belonged elsewhere, and we decided that STS would easily be incorporated into other sections due to the prevalence of the approach in all areas of environmental sociology. In short, we made some choices about how to organize the two volumes, but as most scholars will know, these categories are porous and fluid in reality, even if they are inscribed on paper. We hope that readers will see connections and continuities outside of those we have chosen to develop organizationally, and may find some personal inspiration and creative insight through those unwritten threads – inspiration and insight they ultimately contribute back to the careful, committed conversation of environmental sociology.

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