Book Reviews

Park, Susan, and Teresa Kramarz, editors. 2019. Global Environmental Governance and the Accountability Trap. Cambridge, MA: The MIT Press.

Reviewed by Nino David Jordan University College London

In global environmental governance, *accountability* tends to be narrowly perceived in terms of correct behavior within the confines of already-given institutional choices. What if that's a trap? What if the environment keeps deteriorating and we waste our time arguing about how to improve the accountability of actors embedded in deeply unsustainable institutions?

Are the organizations governing the global environment accountable to the environment itself? Certainly not, as "the environment" is commonly not perceived to have agency (Gaia theory/beliefs notwithstanding). Instead, they are accountable to a whole array of different organizations and individuals. The perceptions of who ought to be accountable to whom, in what way, and in accordance with what procedures vary across different issue areas and actor constellations. Susan Park and Teresa Kramarz, the editors of Global Environmental Governance and the Accountability Trap, argue that the preoccupation with accountability focuses too often on only the narrow aspects of the implementation and performance of agreed procedures ("second-tier" accountability) rather than on the goal orientation and design of institutions ("first-tier" accountability). Given the ongoing worsening of the environmental crisis, for Kramarz and Park the preoccupation with second-tier accountability is insufficient at best and even runs the danger of distracting from the necessary deeper institutional reform. They lament the lack of feedback loops from second-tier accountability mechanisms and processes back to goal orientation and institutional design. Ideally, they contend, accountability norms and practices should be engaged to open up conversations and contestation about how to reorient governance institutions toward greater environmental effectiveness.

The authors advance acute reflections on the challenges and opportunities that governance in polycentric systems poses for accountability. Cristina Balboa shows how environmental nongovernmental organizations' mission to fight environmental degradation first gets derailed by having to compete with a multitude of peers for limited resources and then becomes further complicated by the pressure to be accountable to an amorphous, ambiguous, and potentially open-ended set of stakeholders with no clear hierarchy for whose concerns should be prioritized. Lars Gulbrandsen and Graeme Auld locate the contestation around the accountability of the Marine Stewardship Council's (MSCs)

"sustainable" fish certification procedures within a polycentric governance situation where the MSC interacts with state regulation, environmental activists whose ardent critique of an unsustainable fishing industry has induced demand for the MSC label in the first place, and alternative NGO approaches for shaping consumer demand toward more sustainable directions.

The bracketing introduction and conclusion by the editors are thoughtful yet difficult and abstract. The chapters by Hamish Van der Ven on "Private Governance in Global Value Chains" and by Cristina Balboa on "Participation Versus Performance: The Crisis of Accountability for Environmental Nongovermental Organizations" could easily stand by themselves and would make excellent additions to syllabi concerned with environmental certifications or NGOs, respectively. The chapter by Gulbrandsen and Auld could also serve as a general introduction to fisheries certification.

There are also empirically rich but dense and narrowly focused chapters on interstate emissions accountability in climate politics and on hybrid accountabilities in cooperative initiatives for global climate governance and illegal wildlife trade governance.

A reflection on the role of polycentricity would have been an interesting complement to Park and Kramarz's suggestion that accountability should ideally inform learning about institutional designs more appropriate for tackling environmental challenges. How can we expect assertions and refutations of accountability to generate learning and inform institutional design in settings with multiple and often competing actors? While the authors often focus on "voice," what is the role of "exit" (and competition)?

The editors' suspicion that excessive concern with accountability at the stage of implementation distracts from the need for more profound reform and thus institutional design seems warranted. Yet the authors themselves largely devote their attention to second-tier accountability. Its relationship to first-tier accountability is only fleetingly spelled out. The problem is already embedded in the very accountability definition serving as a common thread throughout the various chapters, which characterizes accountability within agreed, specific frameworks rather than the situations typical for goal definition and institutional design. The chapters systematically repeat a definition of accountability by Grant and Keohane—"some actors have the right to hold other actors to a set of standards, to judge whether they have filled their responsibilities in light of those standards, and to impose sanctions if they determine that those responsibilities have not been met" (3). Arguably, this definition is likely to fix attention more on second-tier than on first-tier accountability, since goal definition and institutional design are political acts where appropriate standards of behavior still leave considerable discretion before constituents would be entitled to resort to formal sanctions.

The editors could have made a stronger case for the advantages of their constructivist framework, which only loosely brackets the various chapters, by clearly outlining how it helps to understand accountability relations better than other theoretical traditions, for example, the more rationalist institutionalist accounts associated with Robert Keohane, coauthor of the accountability definition that serves as a common thread throughout the various chapters.

This volume has achieved significant steps toward problematizing the relation between accountability mechanisms and environmental degradation. The individual contributions stay within the confines of an assessment of second-tier accountability and how it relates to first-tier accountability, however. That feedback loops from second- to first-tier accountability alone do not lead out of the "accountability trap" is clear. Park and Kramarz argue that accountability should be used "as a means of exposing the underlying politics of choice, learning and reconstituting [global environmental governance] to lead to better environmental outcomes" (220). Future scholarship should seek to empirically map the extent to which engagement with existing accountability mechanisms has indeed given rise to repoliticized institutional learning processes and resulted in improved environmental outcomes. A promising complementary exercise could also learn from the collected case studies by charting pathways toward greater environmental sustainability.

Neville, Kate J. 2021. Fueling Resistance. New York, NY: Oxford University Press. Reviewed by Sandra O'Neil Curry College

In *Fueling Resistance*, Kate Neville dissects the processes, and political economy framework, of resistance to two different alternative fuel projects in two distinct and disparate locations. The comparison centers on resistance to a biofuel project in Kenya and a fracking project in the Yukon territory of Canada. The unwritten premise is that these two energy projects, and the subsequent resistance to them, may not have obvious similarities given their distinct characteristics and locations but in fact have several elements in common. Neville outlines how these cases can be viewed as similar and concludes that understanding the patterns of resistance to these two fuel projects could help in moving future fuel projects forward—even within the renewable market. The focus of the book is not necessarily the outcomes of resistance but the process and the social forces that shape the process.

Before dissecting the two cases, Neville sets the stage for understanding the sociopolitical context for the projects. Understanding the time frame is one important aspect of understanding what might influence communities to be receptive, or not, to these types of projects. The projects both occurred in the early to mid-2010s, a time when climate change was certainly in the lexicon, but also a time when security and the push for domestic energy production and energy independence were national priorities. The central argument focuses on three intersecting political economy factors that influence these two cases of resistance:

finance, ownership, and trade relations. These three factors and their influence on the cases in Kenya and Yukon are then described in detail. Although it may be implied, Neville never specifically notes these three factors are merely a subset of all of the factors that affect resistance. There are certainly others, a few of which are explored at the conclusion of the text.

The distance between parties who will financially benefit, control, and operate a project and the communities who will live near and with the project clearly matters, and the book demonstrates how this factor contributes to resistance. In these contexts, ownership and finance of a project can set the stage for insider and outsider identities that can affect the degree of trust or mistrust communities have for those in charge of a project and therefore the project itself. Insider/outsider identities can also highlight different land values. In Yukon, the desire for a safe and healthy environment surfaced, and in Kenya, concerns about pastoral access and ecosystem disruption were among "insider" concerns. The book leans heavily on social movement theory to understand the processes in each of these locations, reviewing opportunities for mobilization as well as competing frames based on different values, particularly land values. Neville uses social movement theory to describe the symbols and frames employed to gain momentum for those on "both sides" of the projects. For example, in the biofuel case in Kenya, the project was linked to food (in) security, land grabs, and biodiversity, evoking symbols of water quality, hunger, and colonization. In Yukon, the fracking project brought values of water protection and extraction versus conservation to the forefront and used symbols of rivers, snowcaps, and caribou.

The impact of biofuels on agricultural markets, competing visions of land-scapes and land uses, distrust of investors, and mixed-to-sour previous experiences with projects all layered on top of a long history of colonialism and land conflict that strengthened resistance to the project in Kenya. Themes of distrust of outside investors were paralleled in the fracking case in Yukon. In addition to finance and ownership, trade contributed to resistance in both projects. In particular, the facts that local benefits were limited and that the benefits of the projects would be felt in distant locations shaped the perspective that outsiders would benefit at the expense of local land loss. This perspective also speaks to the scale of projects required for investors to make a profit. Both projects required nonlocal markets, exporting the benefits out of the local community, to be economically viable.

Although the book's focus is on finance, ownership, and trade as the political variables shared by these projects, Neville also discusses how these cases shared themes of scientific uncertainty and the importance of land use and competing values and visions of land, though not as independent influencing characteristics. Both cases happened during a time of technological developments and new scientific research regarding the carbon benefits of these technologies that "undermine(d) the climate justification for these energy developments" (13). In the biofuels case, there was significant controversy regarding the types of land that would be used and the effect those choices would have on potential

carbon reduction—or carbon increase. Similarly, research was developing regarding fracking's "fugitive" emissions that postulated that a full accounting of fracking would negate its benefits as well. Additionally, in the Yukon case, there was concern that moving forward with this technology would delay the adoption of or investment in more beneficial renewable technology options. While Neville does acknowledge both the problem with and the appeal of technological fixes that do not require changes in the power structure or consumption patterns, this idea is not a central focus of her research. In addition, discussions of power that underlie the ability to manipulate and manage the dominant frames in a contested project are not fully explored. Power relations are always an important factor between industry and community in contested projects.

Neville brings forward a "crisis frame" in the conclusion of the book. This frame is less integrated into previous sections of the text but is of significance in understanding the two cases, especially in the broader climate context. The concepts of crisis, climate change, and technology are woven together as a "warning" of sorts, indicating that we need to pay attention to the zeal we have for "quick fixes" to complicated problems, even in a time of crisis, such as the one we now face with climate change. Technology alone, especially technology fixes that do not address embedded issues of power, cannot solve what will require massive societal shifts in our economic system. It is not until the conclusion that Neville begins in earnest to push the concept of procedural justice, the importance of community participation, and the active engagement of communities affected by projects, ideas vital to environmental justice discussions.

Finally, she discusses more broadly how lessons from these cases could apply to renewable projects, such as large-scale solar and wind. This could be the most important takeaway from the text. What was learned here is not just applicable to the contentious energy projects examined in the book but can be applied to any project requiring a large land area or vital resource, whether a project is based on fossil fuels or alternative or renewable energy. Communities and developers will have different land values through which they view a project. This text focuses on and illuminates larger political economy characteristics of finance, ownership, and trade that will likely impact and potentially "fuel" resistance to future energy projects.

Redford, Kent H., and William M. Adams. 2021. Strange Natures: Conservation in the Era of Synthetic Biology. New Haven, CT: Yale University Press.

Reviewed by Adam Wickberg KTH Royal Institute of Technology

What is natural and what is artificial in the era of the Anthropocene? This is the core question addressed by Kent Redford and William Adams' book, *Strange Natures*. The book builds on the two authors' long-standing work in

conservation, in both research and practice, and reads like a well-wrought combination of an assessment report of the status of synthetic biology in conservation practice today and a powerful deep dive into the changing nature of nature in the Anthropocene. While the figures and facts about this new geologic era are not easy to summarize in one sentence (as testified by the numerous and long-standing debates around the concept), humans have altered the nature of this planet. With virtually no area untouched by human impact, the distinction between nature and culture is increasingly hard to uphold. After decades of debates and discussions, this position has now become commonplace in the more theoretically oriented humanities and social sciences, backed up by mounting hard evidence from Earth systems science. For readers less oriented to the internal debates of conservation research and practice, this book offers an intriguing hands-on example of what it can mean that distinctions between human culture and nature are blurred.

Genetic modification for agricultural purposes has been much debated by environmentalists, who have raised concerns about its impacts on both human health and ecosystems. The notion of gene editing as a conservation tool faces a steep uphill road in convincing both the public and conservationists of its usefulness. Redford and Adams patiently guide the reader through the many perspectives that have permeated the discussions on synthetic biology in the last decade. During that same time, the technology for gene editing and advances in synthetic biology have exploded and offer hitherto unimaginable possibilities, such as the prospect of bringing extinct species back to life. While the ethical, moral, and philosophical problem of genetic alteration is now old, the situation today is new. The speed of technological development is also matched by the speed of biodiversity loss in our age of mass extinction. Conservationists need to consider the complex situation in which humans are driving accelerating global environmental change that threatens to deteriorate the life conditions of many species, while also possessing the technical capabilities to change the genomes of these species to help them survive this rapid change that evolution can't keep up with. If conservation is about saving biodiversity from negative human impacts, it would be strange if the technology that could do that more efficiently than any other technique would be discarded without serious consideration.

While the balance of the many perspectives on the risks and possibilities of synthetic biology is generally a strength of the book, it can at times lead to an almost catalog-like account of potential positions on this complex issue. The authors' views are most clearly expressed in the last chapter, which convincingly makes the case for gene editing. While this delay in making the argument could be considered a weakness in terms of reader friendliness (particularly for those looking for quick answers), it also rewards the slow and thoughtful reading from beginning to end that the subject demands.

In scrutinizing the underlying assumptions of those who oppose the use of synthetic biology for conservation purposes, Redford and Adams show that, in many cases, an outdated and impossible notion of a pure nature safeguarded from humans has been the guiding principle. The authors are clear that the risks of using synthetic biology should not be downplayed but that cautious development of this technology may be necessary for conservation practice to work well in the Anthropocene. Uncertainty about technology lies behind the emergence of environmentalism as a global movement in the twentieth century, and notions of a pure nature have followed human culture ever since the notion of the garden of Eden. But as scholars of historical ecology have made clear, the large-scale human alteration of ecosystems like the Amazon go back several millennia. As Redford and Adams contend, "wilderness is a cultural concept. Yet despite the overwhelming evidence documenting the depth and extent of human impact on nature, the notion of a pure and untouched nature waiting to be protected retains a powerful draw" (199–200).

This book convincingly shows that, instead of the notion of a nature separate from culture with static environments in need of conservation of an original pure state, a dynamic concept of a long human–nature relationship may be both more accurate and also the best way to safeguard a nature with a tremendously rich biodiversity that is essential to evolution and life on this planet. It is impressive how the book manages to be so rich in perspectives on such a complex and controversial phenomenon, yet so cautiously and open-mindedly written that it invites contemplation and reflection rather than hasty conclusions. Against this background, the book ends by proposing that, instead of seeing gene editing as another way of subjecting nature to human needs, it could be better understood in conservationist terms as a way to support and assist evolution to sustain genetic diversity and enable nonhuman life to evolve as independently of human influence as possible.