BOOK REVIEWS

Hamilton, Sarah R. 2018. *Cultivating Nature: The Conservation of a Valencian Working Landscape*. Seattle: University of Washington Press. 312 pp. ISBN 978-0-295-74331-8.

To paraphrase an old adage, “When you’re up to your ears in alligators, it’s hard to remember you set out to conserve the wetland.” The Albufera of Valencia, a former delta complex of the Turia and Júcar rivers, enclosed by a sandbar, is a lagoon bordered by vast rice fields. Located in the suburbs of Valencia, it suffers from pollution, encroachment, and overuse. The metaphoric alligators are the rival interest groups involved in managing it: conservationists, water managers, rice farmers, tourism developers, urban planners, and upriver actors who generate pollution. Each of these groups has an agenda, sometimes with several counter-agendas.

Sarah Hamilton’s book is a remarkably fair and evenhanded history of the conflict, largely in the past two centuries. The chief message of the book is that the competing interests and the constantly shifting realities of the wetland make management difficult and optimal management impossible, so constant dialogue takes place, in the context of varying policies. Hamilton clearly hopes for management that saves the unique qualities of the wetland—notably its wildlife and its rice agriculture. She is also aware of needs for economic development. She places her work in a context of European efforts to save heritage farming systems as part of national

parks. Her book is an important contribution to studies of the resulting conflict between conserving wildlife and conserving agriculture. Like other writers, she concludes that well-managed farming can maintain or even increase biodiversity, while simple exclusion of economic activity reduces it.

To summarize her narrative: the lagoon has existed for about six thousand years, since sand carried down by the Turia River drifted south to form a barrier beach. The region was known to the Romans, who developed it and used the lagoon for hunting and fishing. It entered its own in Spanish monarchical times as a royal hunting area, transportation corridor for sailing craft, and a fishing ground. In the twentieth century came urban expansion and rice agriculture. Always a minor rice region, Valencia exploded as a granary of Spain with the development of intensive rice farming in the Albufera, involving conversion of most of the lagoon-marsh complex into rice *tancats* (basically, paddies). The famous Bomba rice developed, becoming the proper rice for paella: short-grained, rather hard, and uniquely able to resist turning to glue under the high, prolonged heat of paella-making. Ordinary smallholders produced much of this, in contrast to the latifundia too common in most of Spain. It provided small farmers with a chance to do very well. Environmental advocacy had begun by 1900. European birders discovered the Albufera. Meanwhile, industry expanded, polluting the rivers. Upstream cultivation drew down the

water. Only small and polluted flows reached the Albufera. Sand now must be trucked in to maintain the beaches.

Hamilton describes the Franco dictatorship (1939–1975) as an up-and-down period for the Albufera. Franco knew he wanted total power but did not always know what else he wanted. Policies toward conservation fluctuated. Advocacy for the environment was safe and legal. Dissidents—not always with the environment as their real concern—could speak out. Following Franco, Spain went through economic hard times, political strife, and considerable soul-searching. One aspect of the last was the rise of various forms of environmentalism. (Hamilton compares the similar tensions over the Guadalquivir delta.) The Albufera was worthy of conservation as a biodiversity hot spot and bird paradise, and as a rice farming area with its own varieties and local traditions. Birders and farmers formed coalitions or fought it out, depending to a great extent on the tact and leadership skills of local civic figures. At present, most people, including the author, appear to want it all: birds, rice, what few fish are left after the decades of pollution, and beach amenities. Local groups and authorities are constantly readjusting the balance. The region and nation desire economic growth. Bayesian optima and Nash equilibria are hard to find.

Hamilton discusses this in the context of a problem faced all over Europe: conservation of biodiverse, heritage-rich, and scenic, but technologically antiquated, farming systems. Farmers protest being chained to obsolete farming systems that cut their profits. One problem is the European Economic Community. Small-scale and even sizable farming systems must be subsidized or protected to compete with industrial agriculture in other EU states. Tractor protests stopped me more than once while I sought wetlands in Spain, and the rice farmers of the Albufera too have stopped traffic with their tractors.

This study could benefit by attention to political ecology, a field that addresses such multisided conflicts with attention to wider

political and cultural contexts, using economic and political theory. A political-ecological study has been done for the Albufera (Hulshof and Vos 2016). Similar research in the United States by Sara Breslow (2011, 2014) provides a useful model. Also, being political history, Hamilton does not go into detail on the wildlife of the Albufera, which I find unfortunate. Overall, however, this is a very good book. It is written in a clear, flowing style. It treats issues and controversies fairly and honestly. It covers considerable ground with skill and balance. The book ends with a local recipe for paella—the famous product of Valencia's rice ecology. I'll be trying it.

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- Besky, Sarah, and Alex Blanchette, eds. 2019. *How Nature Works: Rethinking Labor on a Troubled Planet*. Albuquerque: University of New Mexico Press. 272 pp. ISBN: 978-0-8263-6085-4

Sarah Besky and Alex Blanchette's edited collection *How Nature Works: Rethinking Labor on a Troubled Planet* is a call for a renewed politics of work that includes the other-than-

human and questions labor as value. Using Kathi Weeks' (2011) book *The Problem with Work: Feminism, Marxism, Antiwork Politics, and Postwork Imaginaries* as a launching pad, the authors build on Marxist theory, feminist critiques of capitalism, science and technology studies, and multispecies contemplations to question the values (economic and beyond) of labor, what counts as labor, where and when labor takes place, and what role the other-than-human might play in understandings of these questions. Moving beyond narratives dominated by capitalist production as an autonomous and unstoppable force, all the chapters in the volume are grounded in a consideration of the capacity of the non-human to "work upon us, against us, and perhaps with us" (3) while calling into question the ways that new, different, or harder work is positioned as a savior to precarious times. Collectively, these pieces entwine economic and ecological precarity in order to ask how we might best understand the productive activities of the species that together make up our planet.

The authors divide the book into three parts. First, "The Ends of Work," examines the interconnections between the human body, other-than-human species, labor, and industrialized space. Covering ideas of sickness, boredom, life, and killing, the authors contribute to a diverse exploration of how industrialization changes—not only ideas of work but also the species and places through which such transformations take place. Besky's contribution on Indian tea plantations describes how workers and plants alike go through cycles of work and sickness—an endurance that leads to an exhaustion of human, plant, soil, and system. Besky's is the first among many in this collection to focus on monocultures and plantations as sites that eradicate, contaminate, and compete with species around them. Gregg Hetherington's examination of the intimate connections of agriculture and killing in Paraguay's soy plantations notices this theme. Heatherington demonstrates the role soy production plays in killing

local livelihoods as corporate led efficiency removes humans from the landscape along with the livelihood associated with prior cotton-based agriculture. The last chapter, by Alex Blanchette, is a strength of this section. Blanchette's research in US factory hog farms examines the fragility that emerges from industrial and totalizing processes where animals depend on human labor for basic bodily maintenance and functioning, challenging standard notions of labor and extending conceptualizations to include nonhuman species and their interactions with human bodies. Together, these pieces demonstrate the entanglements between human labor and the other-than-human species while questioning where work begins and ends for each.

The second part, "Labor Struggles," extends the ideas of labor and struggle beyond the bodies of conventionally recognized workers, to those on the fringe of capitalist processes, other-than-human species, and ecosystems themselves. The chapters provide ways of understanding the processes and effects of alienation, industrialization, and intensification, including the narrative shift of local histories to better continue capitalist expansion, appropriate place, nature, indigeneity, and all the entangled labors therein. The focus of the chapters in this section varies and includes contemplation of the work of both laborers and orangutans at a rehabilitation center in Borneo (Parreñas), ginseng plantations in a demilitarized zone of Korea (Kim), the nature and impacts of heat in Nicaragua (Nading), Peru's gastro-political revolution and the guinea pig (Garcia), and honey bees in the US (Kosek). As humans and non-humans work in parallel, they also coproduce stories about the meaning, impact, and outcome of their toil. Together, these chapters offer examples of the ways that companion species have become entwined within webs of labor—as, for instance, bees' DNA changes in adaptation to chemical exposure, and elite chefs market the potential of guinea pigs as haut cuisine—while questioning the idea of who indeed works.

The final part, “Futures of Work,” examines the ways we might move to a contemplation of what work means. These chapters consider scale, refusal, and temporalities as models to explore how nature and work connect. John Hartigan Jr., in a cultural analysis of microbial worlds, dives into the world of the petri dish and the apparent sociality of microbes as they migrate, form communities, compete, carry cargo, and sacrifice themselves. Hartigan pushes readers to move beyond the metaphor of such concepts to embrace them as true reflections of the actions of other-than-human beings. Shiho Stuka’s research on the matsutake mushroom stretches the idea of nature to that of a multispecies multitude, operating in varying and simultaneous temporalities—a note of particular importance considering the centrality of regimented temporality entrenched within capitalism. Stuka’s approach refocuses the attention of researchers toward communication between species, or between the rhythms of individuals and species, and the ways such rhythms are coordinated or discoordinated. Lastly, Naisargi Dave, skeptical of the “imperative to matter,” questions the implications of considering how nature works and bringing nature into the capitalist project. Dave brings us back to an appreciation of things that do not matter and are not useful as a form of ultimate resistance—refusal to participate within a system that fetishizes work. This is brought to ethnography itself, as Dave questions the process through which context, meaning, and matter within ethnography come to override wonder and the importance of the mundane.

How Nature Works is a well-timed collection, joining a resurgent interest in labor with the imperative to consider the other-than-human. As each contribution makes clear, labor certainly involves the nonhuman, and there are compelling arguments made in opening the boundaries of work to consider how nature itself labors. This ends nicely with Dave’s concern over what including nature into these ideas might entail and offers a note of caution: does extending an appreciation of

labor to nonhuman bodies likewise extend an imperative to work? While much is gained in considering the nonhuman within the theoretical framework of labor, these contributions also extend an invitation to contemplate what might be lost.

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Weeks, Kathi. 2011. *The Problem with Work: Feminism, Marxism, Antiwork Politics, and Postwork Imaginaries*. Durham, NC: Duke University press.

Lora-Wainwright, Anna. 2017. *Resigned Activism: Living with Pollution in Rural China*. Cambridge, MA: MIT Press. 272 pp. ISBN: 978-0-2620-3632-0.

Environmental pollution and its effects on daily life are well-recognized outcomes of China’s rapid economic growth via industrialization, urbanization, and position as the “world’s factory.” As a primary cause of urban, middle-class unrest and protest in China, pollution has been met with state efforts to “build an ecological civilization” and “wage a war on pollution.” In her sweeping ethnography, Anna Lora-Wainwright examines the less visible ways that rural villagers live with and make sense of pollution in the context of their relationships with the polluting industry, authorities, and other stakeholders. Local concerns and responses to pollution, as Lora-Wainwright documents with careful detail, are varied and heterogenous. They demonstrate an unsuspecting coexistence of strategies that directly oppose pollution and are ultimately resigned to it, a concept Lora-Wainwright terms “resigned activism.”

The apparent contradiction in the term resigned activism offers a much needed analytic to explain the complex, contradictory

responses to pollution in rural China. Drawing on James Scott's (1985) logic of subtle resistance and John Gaventa's (1980) understanding of powerlessness as historically formed, Lora-Wainwright's intervention targets the sociopolitical space between response and resignation. Its meaning is twofold: referring to efforts to counter pollution at the same time that it comes to be accepted as a fact of life, a new normal. The reader is vividly confronted with lived experiences of pollution, and a range of subsequent emotions—resentment, uncertainty, hesitation, ambivalence, and resignation. Activism in this context is not resistance or an overt, confrontational act; rather, it comes in unexpected and less detectable forms that are coupled with resignation.

Resigned Activism contributes to debates within political ecology and environmentalism, particularly in China. Situated in literature on social movements, environmental health, and environmental justice, it fills an important gap on rural responses by challenging two dominant assumptions: first, that the rural poor always oppose pollution (the David and Goliath story) and, second, that they lack awareness of pollution and its harms. Instead, rural communities economically depend on polluting industries despite uncertainties surrounding effects on health and the environment. Lora-Wainwright unpacks these spaces of uncertainty, describing how citizens “are caught between what they may recognize as relatively incontestable embodied evidence of pollution's harm and a feeling that their forms of evidence do not count” (10). As villagers “get used to” pollution, they navigate a terrain of slow violence that exacerbates structural inequalities and perpetuates feelings of powerlessness.

Because typical acts of protest—petition, negotiation, litigation, advocacy, or outside assistance—are not always possible, in chapter 2, Lora-Wainwright develops a typology of conditions that influence atypical actions for seeking redress. Factors that influence perceptions of and responses to pollution in “cancer villages” (Chen et al. 2013) include

(1) its level, type, and link to illness; (2) community cohesion and leadership; (3) local political economy and dependence on the polluting industry; and (4) outside support or attention through NGOs, media, and experts. These themes foreshadow the complex, personal responses to pollution in the remainder of the book.

In the chapters that follow, Lora-Wainwright presents three cases of resigned activism surrounding phosphorous processing, lead and zinc mining, and electronic waste. In Baocun, Yunnan (chapter 3), villagers have come to accept noxious conditions from mining and phosphorous. Through Richard Hofrichter's (2000) notion of “toxic culture,” Lora-Wainwright shows that while pollution is one form of toxicity, “the social arrangements that encourage and excuse the deterioration of the environment and human health” are another. For example, a state-owned fertilizer company built most of the local infrastructure and pays considerable taxes, leading to feelings of resignation among the poor, who view themselves as simultaneously harmed by and beneficiaries of the industry. Similarly, residents of Qiancun, Hunan (chapter 4), rely on lead and zinc mines for employment and thus are less inclined to directly oppose it. Instead, to seek redress without losing income from mining, villagers claim exposure to pollution through water without pointing directly to the mines. In Guiyu, Guangdong (chapter 5), the line between perpetrator and victim is further blurred, as residents initiate small-scale e-waste processing in family homes. Despite Guangdong's economic rise, lingering memories of poverty inform attitudes toward e-waste work. In each case, resigned activism is located between compliance and critique—“praising economic boom, while deriding the unequal distribution of harm and benefit” (156). The concluding chapter offers a framework of factors influencing rural activism, relevant not only in China but where public response to environmental issues is limited.

Developing an ethnography of pollution, particularly in this context, is no easy feat.

Scholars of China are increasingly confronted with challenges of conducting research in a heavily monitored, single-party state. Lora-Wainwright frankly describes her struggle to make feasible recommendations and bridge scholarship and activism (*à la* Schepers-Hughes 1995). Her methodological reflections (Appendix) offer the seasoned and novice researcher insights into these challenges, as she models collaboration and negotiation in ways that are acutely attuned to her positionality and repercussions for informants and Chinese colleagues. The book will appeal to scholars from an array of disciplines including China studies, anthropology, public health, geography, and environmental studies. Both captivating and accessible, it would be an exceptional addition to a graduate seminar or ethnographic methods course. The analytical framework presented in chapter 2 could also stand alone in undergraduate environment/society or development and health courses.¹

Resigned Activism is an important addition to ethnographies of health, environmental justice, and pollution in China, contributing further empirical rigor to the argument that the effects of pollution from capitalist industrialization are unequally distributed. However, her novel contribution is to reveal how environmental consciousness itself is formed. This approach is essential, as each case reveals possible spaces for future collective responses to pollution. As such, differentiating between resigned activism and activism may lead to more fruitful areas of inquiry and public engagement, and “restore attention to agency as it emerges in unlikely places and subtle forms” (175).

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a visual companion to themes in *Resigned Activism*, as it follows Edward Burtynsky’s stunning photography of industrial landscapes in China.

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- Symons, Jonathan. 2019. *Ecomodernism: Technology, Politics and the Climate Crisis*. Cambridge: Polity. 232 pp. ISBN: 978-1-5095-3120-2.

In *Ecomodernism: Technology, Politics and the Climate Crisis*, Jonathan Symons makes a case for a socio-democratic variation of ecomodernism. Eco-modernism is an ambitious project that believes technological innovations—not consumption reduction—can resolve global environmental problems. Eco-modernism is typically associated with the Breakthrough Institute, whose publications form the foundation for Symons’s inquiry. He distinguishes his approach, however, in two ways: centralizing the “primacy of politics,” and impressing a need for universal basic services alongside massive public investments into research and development.

NOTE

1. Director Jennifer Baichwal’s documentary film *Manufactured Landscapes* (2006) offers

Symons wages an intellectual battle against “green thinking” or the “green politics of limits.” The degrowth movement and local-food movements are provided as examples of green thinking. In his critique, Symons argues that reducing consumption today is politically infeasible and will require undemocratic strategies of control. Moreover, much of climate change, he argues, is locked in, and those effects cannot be undone by reducing consumption today. Further, any effort to reduce global consumption also risks denying developing countries the opportunity to chart their own economic future though that may at times mean more fossil fuel usage. Symons, however, risks tearing down a strawman when he overgeneralizes the green movement as a singular and coordinated anti-technology group.

According to Symons, technological innovations to climate change should not be dismissed without careful consideration. He accepts that technologies have had negative unintended consequences in the past, but they have also provided pathbreaking solutions for the economy, environment, and public health. If innovations are overseen by the democratic state, he argues, then they will serve the public interest, not some narrow partisan or private interests.

In chapters 1 and 2, Symons argues that “green” attitudes toward technology that emerged in the mid-twentieth century were a response to the excesses of capitalism, disasters like Chernobyl, and technologies such as DDT. When these “green” attitudes were translated into policy, he claims, they took the form of population control and localized agro-food movements. But, according to Symons, these movements have largely failed to reduce environmental problems at scale, and worse, they have prevented poor countries from determining their futures. For ecomodernists, the policy challenge is not to slow economic metabolism but to fast-track innovations in a way that improves lifestyles for the poor as well as decouples the economy from the environment. Ecomodernists believe

these innovations are not happening because the environmental community has a “blanket prohibition on intervention in nature” (72), preferring instead “decentralized, local production as a more ‘authentic’ form of existence” (80). As a result, innovations like nuclear power and GM seed engineering are not a political priority. He implores green thinkers to renounce metaphors of limits and overpopulation, and instead embrace his vision of “global social democracy” that transcends limits through technological change.

Chapter 3 assesses the kinds of technological innovations needed to address climate change. Using data from the Intergovernmental Panel on Climate Change, he shows that emissions are rising and even a complete halt in consumption today will not be enough to prevent a continued increase in global mean atmospheric temperature. Moreover, the poor suffer the most when environmental politics focus on promoting less energy use (100). He writes that if developed and developing country lifestyles were to converge on some reasonable common level, say that of Sweden, the world would still be consuming four times its current energy consumption (102). Policies focused on reducing consumption, he claims, are simply not a realistic climate mitigation option.

Chapter 4 lays out his vision of how social democratic ecomodernism would work. Symons argues in favor of a “primacy of politics”—a deliberated and state-sponsored innovation project. He argues that comparing his version of ecomodernism with neoliberalism is unfair because he sees the state, not the market, as the entrepreneur of green technologies. He discusses how the state has historically sponsored technological innovations in energy use and efficiency, including railroads, agricultural innovation, nuclear technology, biotechnology, and fracking. However, his simplistic conception of the state ignores the problematic history of state dispossession that has often worked through these same innovations and through the narrative of environmentalism at the expense of resource

dependent communities such as forest dwellers and smallholder farmers. Such history is well documented by political ecologists, but not considered in the text.

In chapters 5 and 6, Symons engages global environmental politics. In chapter 5, he reasserts the importance of national sovereignty in determining energy futures, as opposed to conditioning international aid to adoption of certain green energy technologies. Rather than provide a practical solution, he finds that “green conditionality” hurts countries by constraining their freedom in determining what mix of energy technologies can most effectively help them meet their domestic goals. He compares “green conditionality” to World Bank policies known as the Washington Consensus, because both policies conditioned aid to adoption of certain kinds of policies. His view is not to force countries to act in line with aid providers but to make renewable energy technologies so attractive that countries willingly embrace them.

Chapter 6 analyzes the most ambitious of global green technologies: geo-engineering. He agrees the geoengineering requires global cooperation, but argues that if we consider large-scale technological intervention alongside a global provision of basic services, many developing countries may prefer such large scale-interventions because they may stand to benefit the most and bear lower costs. Symons commendably lists the flaws of green thinking, but the practical feasibility of his own proposals such as creating a global welfare state or the universal provision of social services receives much less critical scrutiny.

Overall, Symons’s text makes an important case for the role of the state in ecomodernism, a consideration notably absent in many prominent ecomodernist texts. However, the book’s binary framing of a green politics of limits on one end and ecomodernism on the other is its greatest weakness. Environmental politics comprises a range of voices and a critique of technological interventions is one. If we were to take climate change technologies like geo-engineering and nuclear energy

seriously, we will need this diversity of ideas to hold accountable the political economic forces that privilege certain innovations over others. Such critical engagements are missing in the text. Rather than a singular focus on technological interventions, perhaps the environmental movement needs both a politics of limits and a politics of innovation.

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Miller, Theresa L. 2019. *Plant Kin: A Multi-species Ethnography in Indigenous Brazil*. Austin: University of Texas Press. 328 pp. ISBN 978-1-4773-1740-2.

In the context of real and threatened ecological degradation, environmental anthropologist Theresa Miller’s ethnography examines people-plant relationships that Indigenous Ramkokamekra (Canela) foster in the Brazilian Cerrado. *Plant Kin* argues that Canela, a Jê-speaking Indigenous group with legal land tenure, create multisensory relationships of care of and with the plants that share their territory. This care is expressed through their gardening practices and diverse crops. These reciprocal relationships contribute to multi-species resilience despite political and environmental threats.

Plant Kin uses ethnography and ethnobotanical surveys to demonstrate how Canela cultivate Indigenous and ecological resilience. The ethnography centers women and girls, because plant care in Canela lifeworlds is primarily a woman’s task. This foregrounding is also evident in Miller’s syntax (“girls and boys” instead of “boys and girls”). The book’s introduction, five chapters, and short conclusion are rich with ethnographic examples, highlighting resilience, multisensory care and multispecies relationships. Ethnobotanical surveys, meanwhile, exemplify the variety of plants Canela recognize: diversity is key to ecological resilience. These “living lists,” which are continually modified to include

new crops, were compiled with a group of “expert gardeners” who were also Miller’s research assistants. The lists are included as Appendix A and B, while other ethnobiological classifications are found in tables in chapters 1 and 4. The text also features a full-color photo insert of the 50 Canela-identified types of *pànkryt* (fava beans).

“Sensory ethnobotany” is Miller’s main theoretical and methodological intervention. For Miller, sensory ethnobotany is an embodied and multisensory analysis of human-plant relationships and communication. Her phenomenological analysis emphasizes the adaptability and change that people, plants, and other nonhumans are constantly undergoing. Miller uses political ecology to draw attention to history and inequalities. Through this approach, she addresses critiques both of multispecies ethnography as lacking political analysis, and of ethnobiological studies where Indigenous ecological knowledge is often portrayed as static.

Chapter 1 explores Canela landscape aesthetics, as expressed in ecosystem and soil classifications. Miller uses phenomenology to revise David Maybury-Lewis’s and Claude Lévi-Strauss’s classic structuralist analyses of dualisms and triads. While Canela classifications have several dualisms (e.g., classifying soil types into complementary or oppositional pairs) that sometimes form triads (e.g., between a river garden, a forest garden, and the village), they represent continually unfolding relationships, rather than reflect static categories.

Through a two-hundred-year historical overview, chapter 2 argues that gardening is a form of resistance to structural violence and dependency on *cupên* (outsiders). Violent disputes with settlers have led to Canela losing territory, relocating, and gradually shifting to more sedentary villages with larger gardens: “While resulting from larger processes of structural inequality, the transformations of Canela gardening practices are understood by the community today as authentically Canela ways of dealing with

and resisting these inequalities and as ways of continuing to engage with the environment on their own terms” (49). Although not explicitly framed as such in the book, this recognition of Canela definitions of authenticity has important implications for the politics of authenticity and indigeneity more broadly. It creates space for Canela to define themselves beyond their relationship to the settler-colonial state.

Chapter 3 posits an “education of affection,” showing how Canela teach girls and boys to care for plants. Because, for example, there are similar food and sex prohibitions surrounding human childcare and plant cultivation, Miller argues that plants become crop children. Crops have “agentive capacities”: they can communicate their needs and express their emotions (90). Happy plants will stay in gardens and produce plentiful crops while unhappy plants will dry up and relocate. Canela keep plants happy through ritual songs, touch, and regular visits. Through reciprocal relations of care, Canela cultivate multispecies conviviality. The fourth chapter describes how Canela value diversity by classifying and naming crops. Canela foster diversity through seed sharing and by discovering new varieties in their gardens (from introgression, hybridization, and outcrossing). Pursuing diversity contributes to multispecies resilience. Miller maintains that the ethnobotanical lists she created with her research assistants supplement existing ways Canela cherish diverse crops.

The final chapter shows how shamans adapted their historical roles to support successful gardens through their heightened communicative abilities. Although animals, plants, and objects in Canela lifeworlds do not have souls, they all express “intentional capacities” through communication or mobility (227). Crops and Plant-People (representing an entire variety) engage with shamans to ensure plant needs are met. Relationships with Plant-People can be friendly (with Plant-Men) or seductive (with Plant-Women), but shamans also protect garden

spaces from potential harm inflicted by wandering spirits.

Plant Kin seeks to address critiques to multispecies ethnography. Its emphasis on reciprocity and care, for example, is an implicit critique to predominant predator-prey relations in Eduardo Viveiros de Castro's perspectivism (the view that all beings see themselves as human and their food as prey). Canela separate consumption from caring for their crops; mature, harvestable crops are seen as dead and consumable. Miller shows how nonhumans can be included in networks of conviviality and commensality. In one example, Canela ritually share food with crops so the plants, in turn, will produce. It is also worth noting that while Miller includes plants alongside Canela as ethnographic subjects, she does not attempt to approximate a plant's point of view. Rather, she presents how Canela interpret plant emotions, communications, and actions.

The book's stated aim to consider "politics" in multispecies ethnography is less clear. Although historical and continuing threats to Canela livelihoods are included, politics is not a central aspect of the analysis. This is potentially because, as Miller notes, Canela community members discouraged her from exploring the effects of political issues including illegal logging. It may be more appropriate to read her analysis as an attempt to expand what is considered political. As she concludes in chapter 2, "resistance to oppression can be ecological and phenomenological, as well as political" (88–89). In *Plant Kin*, Miller provides a well-written ethnography, arguing that "multispecies futures are possible . . . if Indigenous ontological positionings that support care and resilience are taken seriously" (231). As such, it would interest students and scholars in anthropology, ethnobotany, environmental studies, Indigenous studies, and Latin American studies. It is appropriate for advanced undergraduates, graduate students, and researchers.

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Aistara, Guntra. 2018. *Organic Sovereignties: Struggles Over Farming in an Age of Free Trade*. Seattle: University of Washington Press. 272 pp. ISBN 978-0-295-74311-0.

Guntra Aistara's *Organic Sovereignties: Struggles Over Farming in an Age of Free Trade* is a comparative study of organic agriculture and its accompanying social movements, identity battles, and political and economic pressures in Latvia and Costa Rica. Aistara describes organic agriculture in both countries as a struggle for sovereignty. She argues that farmers experience nested and often contradictory pressures from international trade unions, the state, and local contexts. Aistara's work is multisited and multiscalar, using organic agriculture as an analytical lens for examining the micropolitics of globalization.

Aistara's work emerged from extensive ethnographic research between 2003 and 2006, when Latvia and Costa Rica were negotiating their participation in regional trade blocs, the European Union and the Central American Free Trade Agreement (CAFTA), respectively. Aistara explains in the introduction that Latvia's position in the EU and Costa Rica's position in CAFTA make their situational and historical contexts very different, in addition to their geographies. Despite their differences, both countries became subject to the politics of the regional trade blocs. The EU and CAFTA exerted incredible influence on organic markets, as well as organic farmers' autonomy. In chapter 1, Aistara argues that each country's agrarian history and marginality in free trade regions influenced farmer's subjectivities and expectations. In Latvia, for example, independence from the Soviet Union was still relatively recent for farmers, and combined with an anti-politics sentiment, opposition to joining the EU was relatively silent. Farmers in Latvia hoped that independence would mean sovereignty on their individual farms, supported by the state.

In chapter 2, Aistara demonstrates that entry into the EU or CAFTA naturalized some forms of past oppression. In Costa Rica,

the debate over whether to join CAFTA was animated by what has been called Costa Rican exceptionalism: the idea that Costa Rica is unique among Central American countries in its commitment to democracy. Democracy meant different things to different sides of the CAFTA debate, however, which often included discussions regarding relations with the United States. Aistara argues that scaling the CAFTA campaigns to questions of democracy and US relations left out organic farmers' concerns about CAFTA's effects on agriculture. CAFTA was promoted as a solution for development, another export-based "solution" that had a long history of subjugating Costa Rican farmers. Neither the EU nor the CAFTA movements challenged inequalities that were inherent in the agreements. Aistara returns to the issues with the trade blocs in chapter 5, when she draws from her ethnographic work and analysis of legislation on landed property in Latvia and intellectual property rights over seeds in Costa Rica to show that state and international regulations limit farmers' autonomy.

Chapter 3 examines how family histories and cultural memories are integrated into organic farm spaces, and chapter 4 elaborates on the transformation of those farm spaces into biodiverse landscapes. Biodiversity was not necessarily a goal in either context, but it was a result of farmers' efforts to maintain their land's cultural significance. Often that meant cultivating seeds of multiple varieties and allowing many kinds of animals to graze on the land. Aistara fills these two chapters with rich ethnographic material to introduce a way of imagining biodiversity as something to be created and maintained, rather than simply counted and lost. Biodiversity also includes individual memories, cultural practices, and livelihoods. Organic farmers in Latvia and Costa Rica have a way of managing nature that does not always resonate with broader policies of state or regional trade unions.

The final chapters emphasize Aistara's overall goal to examine the micropolitics of

agricultural globalization while still giving agency to its subjects. In chapter 6, Aistara explores Latvia's first organic milk cooperative and a coffee cooperative in Costa Rica, which both went bankrupt. As both projects failed, farmers continued to reinvent ways to resist, recreate, and defend their sovereignty. Chapter 7 demonstrates that struggles for environmental justice may often include struggles for identity among social movements, nongovernmental organizations, and sectors of the market. Aistara concludes the book by enunciating that organic farmers in marginal areas like Latvia and Costa Rica struggle to maintain the sovereignty of their farms as distinct places with distinct practices, particularly as states try to increasingly connect with regional free trade agreements.

Organic Sovereignties demonstrates that organic agriculture is not merely about one farmer's decision to grow organic crops. Organic agriculture is nested in a confusing dynamic of state legislation and regional free trade agreements that limit a farmer's individual autonomy. With its accessible language, historical contextualization, and rich, ethnographic description of individual experiences, *Organic Sovereignties* reaches a wide audience. It also offers specific contributions to anthropology and scholarship on social movements. Aistara addresses important questions about "places" as relationships across scales; tensions between recognition, participation, and distribution; postsocialism and postcolonialism; and relationships between social movements and the market. *Organic Sovereignties* is an insightful addition to literature on organic agriculture that encourages readers to think about organic agriculture as a way of life and as a struggle for sovereignty nested in regional and global environmental politics.

Aistara's approach is distinctive and daring. She risks confusing the reader, sacrificing depth of any one case and drawing comparisons where it might not initially make sense to do so. Each chapter includes ethnography and analyses from both Latvia and Costa

Rica, with much back-and-forth between the two locations. In each transition, Aistara mentions how farmers' experiences are different in each locale, as well as how they are the same. For the most part, she accounts for the risks brought on by comparative analysis and reveals a compelling, unified story. We learn as much from the differences between the Central American and Eastern European case studies as we do from the similarities. By joining two seemingly disparate places in dialogue, Aistara artfully demonstrates the various ways that regional free trade agreements and globalized agriculture affect local realities. Her multisited and multiscalar ethnography stands out as a critical analysis of how farmers struggle to create sovereignty across spatial scales.

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Drew, Georgina. 2017. *River Dialogues: Hindu Faith and the Political Ecology of Dams on the Sacred Ganga*. Tucson: University of Arizona Press. 264 pp. ISBN: 978-0-8165-4098-3.

Folch, Christine. 2019. *Hydropolitics: The Itaipú Dam, Sovereignty, and the Engineering of Modern South America*. Princeton: Princeton University Press. 272 pp. ISBN: 978-0-6911-8659-7.

As they convert rivers into electricity, hydroelectric dams produce political effects that reverberate throughout society. Two recently published ethnographies show how the socio-cultural meanings and geographies of those rivers distinctly shape the ways hydroelectric dams are political. Both manuscripts are concerned with the politics surrounding decisions to dam (or not to dam) rivers, but they have very different stories to tell and at very different scales. Christine Folch's *Hydropolitics* focuses on the Itaipú dam, one of the world's largest generators of hydroelectricity, and the national yet interdependent politics of

Paraguay as it shares a dam, debt obligations, and electricity with Brazil. Georgina Drew's *River Dialogues* is about grassroots activism against hydroelectric projects in North India and the politics of preserving and developing India's most sacred river.

River Dialogues ethnographically follows activists in a Himalayan region during the planning, construction, and ultimate cancellation of several dams in the upper Ganga. Throughout, Drew carefully shows the complexity and changeability of protest movements but particularly from the perspective of Garhwali women and their devotional relationships to the Ganga, both a river and a sacred Hindu deity. Drew explicates the multivalence of water's meanings throughout, illustrating how personal meanings of the Ganga, often formed through acts of worship, become the basis for many people's activism. But the dam opposition movement, which achieved major successes, had complicated afterlives. The dam projects were canceled, but this resulted in their sudden abandonment mid-construction and, later, the loss of life as infrastructures deteriorated. Further, the establishment of a large ecozone in place of the dams drastically curtailed the economic activities that residents could pursue. Ultimately, the positions of many activists transformed from a passionately anti-dam stance to one that advocated for something more complex: a more locally relevant, potentially dam-driven, development that could generate local economic growth while preserving the sacred river Ganga.

Some of the most important contributions in *River Dialogues* are its ethnographic multivocality and considerations of cultural politics. It comprises many diverse and nuanced voices, from mountain women to "outside" activists, dam construction companies, government officials, and some of the most well-known environmentalists in India. This dialogue is neither static—it realistically shows the fluidity of people's position over time as policies unfold—nor dependent on simple categories. By the end of the book,

an “anti-dam” movement and its proponents can hardly be labeled by so simple a binary as “for” or “against.” Drew rarely positions herself to deliver the final word of this dialogue but rather centralizes the voices of several Garhwali women activists, like Nirmala, who describes her devotion to the Ganga (“our mother” (78)) as motivating her activism. Drew shows that gendered devotional practices, particularly *bhajan* (song), also granted women, often illiterate, effective repertoires of public expression in a movement dominated by men, who would often tell them what to say, talk over them, rely on lettered communication, or, worse, claim women knew nothing of the Ganga (due to the historical exclusion of women from codified Hindu scriptures).

Characterizing cultural politics as a “contentious terrain of social action wherein disparate social groups negotiate or renegotiate relations of domination or subordination” (7), often through contesting shared meanings and values, Drew convincingly sets this framework to the task of disintegrating the false dichotomies and cohesiveness often attributed to environmental mobilizations and, in this case, competing claims on the Ganga and Hinduism itself. But this proposed framework also has important implications for future work on the politics of water in South Asia, where several religiously informed policies have recently granted rights to rivers and ecological processes. What is often left out of international celebrations of these seemingly progressive policies is their entwinement with, at best, majoritarian hegemonies and, at worst, mobilizations of violence against non-Hindus. A political ecology infused with cultural politics, such as advanced within *River Dialogues*, could also help further deconstruct the dominance of Hindu meanings of and claims on particular environmental resources in India and its larger political effects.

River Dialogues is an achievement in ethnographic and theoretical plurality—and a highly accessible one at that. It centers the activism of women, many who are illiterate,

and enunciates the fluidity of their and others’ positions. The ethnography is enriched by theoretical and citational breadth with clear summations of many key debates. Indeed, the book is so readable, nuanced, and reflexive that it would make for a fruitful inclusion in introductory courses to sociocultural anthropology, environmental studies, and political ecology in addition to its relevance to work on environmental activism, water, and the politics of infrastructure.

With *Hydropolitics*, Folch invites us to examine politics in South America from the vantage point of water, which reveals a continent that uniquely derives most of its electricity from hydraulic sources. From this view, we see the geopolitics of South America as a series of hydraulic interdependencies, which makes for complicated negotiations of national sovereignty. Folch argues that hydroelectric energy gives rise to particular political formations such as a strong state presence, dam management as a form of international diplomacy, and the emergence of state-like political apparatuses at regional scales. With the exceptional case of the Itaipú mega-dam, shared by Paraguay and Brazil, two nations with a history of conflict, Folch articulates these political formations as she analyzes Itaipú’s financial policies. Showing how Itaipú hydroelectricity takes on qualities of money—it easily converts between currencies, it is imbued with moral valences, and its circulation protocol depends on the relations of those exchanging—Folch proposes a new construct, hydrodollars, and further asks, is energy money? In analyzing the accumulation strategies pursued by Paraguay (energy rent) and Brazil (debt, while acting as both creditor and borrower), as well as the political grammars within Itaipú finance, Folch demonstrates how Itaipú has become its own veritable financial institution capable of flooding two countries with liquidity and electricity.

Hydropolitics follows a fascinating regime change during which redefining Itaipú for the nation and literally renegotiating its terms

with Brazil became a key issue for a newly elected government. Particularly in the ethnography's third and fifth chapters, one sees varied ideas about both what the state is and should be, and the degree of international diplomacy required not only to renegotiate the dam but merely to manage it at all, resulting in a technocratic governance based much more on law and finance than engineering. Indeed, it seems as if Itaipú diplomacy often overshadows and even replaces other ambassadorial functions between the two countries. To conclude, Folch shows how Itaipú foreshadows future inter-state ecopolitical formations in South America and the Anthropocene based on transnational aquifers and rivers.

The procession of literature that uses water to trace political power is long, yet *Hydropolitics* manages to make a substantial contribution. Folch contributes both a novel ethnographic position and a rare level of granularity to a literature often based on large abstractions. Folch's fieldwork took place literally within the Itaipú dam, in its highest administrative offices where she interacted with the dam's top officials. Rarely streaming her rich rendering of Itaipú into a quick or flashy theory machine, Folch carefully recounts and reviews the diplomatic and planning minutiae of dam managers, thereby illuminating an otherwise rarely seen political world. The ethnography thus shows the day-to-day workings of high politics that can sculpt structural realities within Paraguay, a small nation that has managed to use the dam to resolve a series of past diplomatic tensions and to claim negotiation power with its neighboring economic giant.

Hydropolitics is a substantial contribution to the literature on the hydraulic bases of power, but I found one of its core arguments—that it is water's *materiality* that shapes Itaipú politics—wanting. Water's materiality in *Hydropolitics* is often merely a reference to the transnational distribution of water in South America rather than, for instance, to the dozens of properties that make water unique to other chemical compositions or its radical

variety of physical form and movement. In the absence of sustained cohabitation with water in the ethnography, the frequent reference to water's materiality as a political driver seemed to me a large leap in argumentation. As with any work of concentrated focus, one wonders about further side effects of Itaipú politics, likely beyond the scope of the book, such as how the management, negotiation, and mere presence of Itaipú reverberate differently, not only at the levels of binationality and region but also within the particular nationalisms and social contracts of Brazil and Paraguay.

The literature on the co-constitution of water and politics is vast, so to call the book's title, *Hydropolitics*, ambitious is an understatement. Yet, with its provocative proposals of ecopolitical formations of the twenty-first century, unique ethnographic positioning in one of the world's largest hydroelectric dams, and the granularity of its analyses, Folch's ethnography may be worth the title. It is a book of consequence to literatures on the politics of water, energy, infrastructure, and finance.

The monographs speak to very different scholarship, but I focus momentarily on where they meet—the politics of water. *River Dialogues* and *Hydropolitics* sit at opposite, and rather well-established, poles of a spectrum within this field; at one end are concerns of “hydraulic power” and the bureaucratic control of water, and at the other, the view of citizen-subjects and their access to water often during periods of resistance. Because these literatures often lack what the other provides, it is interesting to read these ethnographies side by side. For instance, Drew's attendance to position, voice, women, a particularly grassroots activism, and the significant meanings of water forged through practice encourage us to ask new questions of *Hydropolitics* (e.g., how do Itaipú's ecopolitical formations register in the lives of ordinary people?) and of the hydraulic power literature more generally. Similarly, Folch's deep dives into specific theoretical discussions jog one into imagining what new discoveries might

be possible for *River Dialogues* if we marinated it a bit longer within the confines of a given theoretical construct.

Folch's rich application of the Maussian "total social fact" concept comes to mind in this instance. The concept has been invoked elsewhere to claim that water pervades all aspects of social life. Folch shows how not just water in an abstract sense, but a specific water-infused assemblage, Itaipú, creates political effects and specters that resound throughout Paraguay, texturing much of its political and economic life: An issue over the dam can easily flip elections; the dam finances substantial portions of municipal budgets and national development projects, indexes Paraguay as a competent borrower internationally, financially lubricates clientelist networks, and essentially established the Paraguayan engineering sector. If we were to think of the charismatic figure at the center of *River Dialogues*—not hydroelectricity or dams but the Ganga—might we hear not just the voices of a particular dam opposition movement and those who dialogue with it but *any* voice impacted by the Ganga's massive pull upon

religion, nationalism, politics, industry, and citizenship in India?

Despite their achievements, I left the books wishing for more engagement with ecological context. Amid many mentions of renewability in *Hydropolitics*, there is little to be found of the environmental sustainability of Itaipú's hydropower. Yet, many hydroelectric dams produce an alarming amount of greenhouse gas emissions, some even more than their fossil fuel equivalents. Drew does address this particular point, but *River Dialogues* is otherwise sculpted along rather human terms: people and their interest in advantageous development, contingent though it is on a flowing river to worship, are given most of the platform even though Drew's concern is exactly the consequences of this on future sustainable development. One wonders what these political ethnographies of environmental control and defense would look like from a more ecologically pluralistic perspective.

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