

BOOK REVIEW

Ecological States: Politics of Science and Nature in Urbanizing China

By Jesse Rodenbiker. Cornell University Press, 2023. 264 pages.
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Crowded streets, spectacular architecture, and neon lights are common images of urban China today. At the same time, eco-cities and green building are all the rage in city development, with China officially embracing low-carbon living and new forms of green architecture. What is less common is a sustained, book-length investigation of how a drive to build a more sustainable world is coming into shape through an urbanizing China. In *Ecological States*, Jesse Rodenbiker centers “ecology” and how it has been governmentalized in contemporary China, with implications for how we think about urbanization, resettlement, and inequality, as well as for how we may build green and sustainable futures globally.

Reading *Ecological States* one understands both that ecology must be central to our understanding of this rapidly urbanizing nation, and that “China is poised to shape global articulations of sustainable development” (193). The book makes clear that ecology, most typically understood as the study of the environment, is not simply a scientific discipline. Rather, it is a central component of governmental power and a “multimodal signifier” (14) such that the state in China today is “wielding ecology to govern” (19) in order “to optimize biophysical relations and foster civilizational progress” (16). While ambitious, the book is successfully grounded in the study of how ecological protection sites – which are required in current municipal urbanization plans – have been identified, built, and experienced. In these protection sites, ecological building has politicized land and living in new ways, reproducing authoritarian power as well.

Ecological States is rich in both historical/ethnographic detail and conceptual tools, showing its value to readers from a wide range of fields. The book has two parts that reflect major aspects of the arguments. The first parts (Chapters 1, 2 and 3) is about ecology and state power, with three chapters highlighting the views of planners, scientists, and official documents and directives, exploring how ecology and ecological civilization have emerged as key governmental concepts and objectives. In Chapter 1, for instance, Rodenbiker traces the emergence of the term ecology through Japan, Europe, and the US, with mention of early botanist Hu Xiansu who was trained both in Chinese classics and at Harvard/Berkeley, as well as how systems science thinking was integrated into city management to make development *sustainable*. While this first part of the book establishes how nature was identified as both “pristine” and “technically enhanced,” it also provides the informational base that allows for the trenchant critique Rodenbiker makes in the second part when examining the unequal social trajectories experienced by rural residents who were forced to resettle when their villages fell within the new ecological protection areas. Also with three chapters (Chapters 4, 5 and 6), the second part provides ethnographic evidence of what happened to the peri-urban rural residents as municipal authorities gained control of their land and housing. As they became “ecological migrants,” the expectation was

that the rural citizens would urbanize spatially and economically, although that was not always the case. Many ecological migrants expressed their own vision of “rural natures in relation to ecology” (132) through entrepreneurialism, “counter-conduct” and even direct resistance.

Rodenbiker engaged multiple research methods to develop these arguments, including interviews with villagers and urban and environmental planners, participant observation, oral histories, archival work, and photovoice, across Beijing, Chengdu, Kunming, and Dali. Additionally, since no official maps existed, he had to *find* the ecological protection areas and resettlement housing for the rural residents. Interviews with key scientists also propelled him to undertake archival work to find historical texts and ecological reports, shaping his genealogy of ecology’s governmentalization in China. Central to the discussion are the emergence and implications of China’s technical methods, scientific framing, and interventionist ethic that have aimed to “optimiz[e] relationships between nature, society, and space” (6). Key themes do emerge, even as each chapter makes its own contribution to scholarly debates. The themes include greening/ecology in contemporary governmentality, spatiality of power relations, aesthetics of territorialization, and how the extension of the municipal state into the peri-urban fringe shapes social trajectories.

Governmentalization of ecology through the spatial and aesthetic

In explaining the alignment of ecology and state power, Rodenbiker centers the role of Xi Jinping’s National New-Type Urbanization Plan, initiated in 2014. This Plan aims to urbanize the population and the economy, optimize rural-urban coordination, and address ecological and environmental issues. Rodenbiker focuses in particular on the requirement in the Plan that 20% of all municipal land must be *ecological protection areas*. In order to meet such a requirement, municipalities have extended their reach into the peri-urban fringe, designating new areas as protection zones and constituting ecology as “instrumental to expressions of state power” (17). This is also in the context of China’s goal to build an “ecological civilization” – what the Chinese Academy of Sciences has identified as the “*highest level of developmental attainment*” (26, emphasis in original). Building this “new civilizational mode of being” (51) and transforming China from “a traditional agricultural society into an ecological society” (41), what one person told Rodenbiker was akin to “Mao Zedong’s campaign to transform the countryside” (3), is based on the urbanization of the population and the landscape. This, Rodenbiker argues, is leading to the dismantling of the rural in China. Significantly, these processes have not been regulated at the central level because they were part of localized urbanizing processes. As land classifications (vs. legal categories), ecological protection areas were newly politicized spaces where new actors and alliances (e.g., municipalities and proprietary owners) “wield[ed] ecology to *consolidate* power over rural land and housing” (p. 78, 79, emphasis in original). Yet Rodenbiker also focuses our attention on the “banal bureaucratic formations” in this process, what he analyses as techniques of governing. These techniques include practices such as environmental surveys, restoration planning, land zoning, quotas for ecological protection, displacement and enforcement of new land use rules. Such an analysis extends our thinking about urban governance in China beyond “the state”, helping us to understand how ecology has been governmentalized.

Trained as a geographer, much of Rodenbiker’s analysis is spatial, whether through concepts of ecological territorialization, rural-ecological sublime, infrastructural diffusion, or volumetric politics. The process, for instance, of municipalities taking over rural areas through ecological protection zoning is what Rodenbiker terms “ecological territorialization” and a “postsocialist moment of urban greening” (79, see Chapter 3). After municipalities gained control of the peri-urban land, they then “disperse[d] land use rights and responsibilities” (79) to newly identified “proprietary owners” who built, financed, and managed the protection land. This included developing revenue-generating leisure activities for urbanities (e.g., hiking and restaurants). Moreover, underlying ecological territorialization was a particular *aesthetic* in which “nature” was conceived as *both* “pristine” and “technically enhanced.” Such a conceptualization produced the “eco-development sublime” where government directives *reconstructed* landscapes to a biophysical “purity”, which, significantly, also meant *removing* harmful practices from the land, i.e., the rural residents.

The framing of the rural citizen as *problematic in the landscape* is a critical aspect of the governmentalization of ecology. Environmental scientists, for instance, drew selectively on history and research to construct nature as pristine biophysically and in need of enhancement (see Chapter 2). The result was that spaces where agriculture had occurred for hundreds of years were seen as needing to jettison the former vanguard of the nation – rural citizens and their activities – *in order to restore ecological balance*. Attaining the eco-development sublime was, in other words, “contingent on displacement” (67) which was itself built on the assumed inferiority of, and “environmental degradation” by, rural citizens (55). Significantly then, this moment of urban greening, distinct from previous “modes of municipal state territoriality” (79), identified agricultural production – and the rural citizen – as *problematic* and thus needing to be urbanized to build an ecological civilization. This particular form of spatio-temporal and aesthetic politics, what Rodenbiker terms the “eco-development sublime”, was leading to “the slow disintegration of village lifeways” (128). Six hundred-year-old villages have found themselves at the mercy of techniques such as “environmental surveys” (179) and the “greening [of] slums” (172). Displacement and resettlement have been normalized as fundamental to the nation’s “eco-development vision” and urbanization processes, reproducing inequalities. Explicating how banal bureaucratic formations – techniques of governing – have drawn ecology into governmental modalities is done really well in this book.

Yet in contrast to the eco-development sublime that was “rapidly dissolving” (104) peri-urban villages, rural citizens mobilized their own understanding of the rural that *included* them and their historical livelihoods, a “rural-ecological sublime” that encompassed traditional fishing modalities (now as tourist activities), cooking (now as ruralized food), and “performing” and “curating” the rural for consumption (157, see Chapter 5). Indeed, “rural-ecological displays are a significant cultural industry” (145) in China, making such activities potentially money-making. The new ecological migrants negotiated displacement in a variety of ways, emphasizing that becoming urban was not inevitable and that becoming poor was not either. Some became entrepreneurs, others defied rules about agricultural production and stayed in the new ecological protection zones, and others endured ongoing harassment from the government to move. The maxim that displacement meant poverty simply did not hold in his research; rather, some experienced accumulation *through their displacement*. There were “divergent ways of accessing space, mobilizing aesthetics, and remembering and re-creating rural pasts” (p. 132), highlighting the value of analysis through spatial politics to understand inequities.

This analysis is an example of Rodenbiker’s point in multiple chapters that rather than relying on more typical structural explanations (e.g., analysis of class or the household registration) to investigate social differentiation, aesthetics and sociospatial concepts may be used. In terms of aesthetics, for instance, he argues that in order to understand rural dispossession and contemporary forms of power, we must consider relations between the two aesthetic regimes of state-oriented eco-developmentalism and counter-conduct-generated rural-ecological sublime. Rodenbiker’s ethnographic descriptions express how these two aesthetic modes – with aesthetics referring to how “things in the world are spatialized, visualized, or associated with beauty” (19) – came into conflict, even leading to violence, the shuttering of rural citizen-run businesses, and the destruction of homes. Additionally, he argues, if planners and other officials recognized *their own aesthetic bias* that took form in the eco-developmental sublime, it could lead to more equitable outcomes that did not rely on displacement. Yet, the contrast between these two aesthetic regimes also worked to reinstate rural-urban differentiation, a way of thinking that separates rather than coordinates or integrates these two spatial realms, reinforcing authoritarian powers as well.

Spatially, he also offers vertical and volumetric politics as ways to understand differentiation for “spatiotemporal politics of land and housing valuation” (107) fundamentally shaped people’s futures (see Chapter 4). For instance, land compensation could take “sky fees” into consideration – the calculation of potential housing space above that which was already constructed. This meant that some families received more compensation than others because of these volumetric politics, leading to divergent social trajectories. In addition, the timing of resettlement intersected with the paying

of “transition fees” to rural citizens who had not yet moved. Local authorities wanted to save money and avoid such fees, often leaving villagers in a state of liminality, underscoring that the temporalities of these processes mattered along with their spatialities.

Finally, a particularly poignant chapter (see Chapter 6) describes the disturbing spatial practice of partially demolishing buildings, what he calls “infrastructural diffusion.” Distinct from scholars who see the development of collective action or sociality through infrastructural politics, Rodenbiker argues that “infrastructural techniques” are forms of urban governance that isolate and diffuse counter-conduct and resistance. The partial destruction of one’s home and the disassembly of utilities, for instance, created an “archipelago of isolation” that “spatially and socially disconnects people and places...[and] has the effect of neutralizing political solidarities” (166). Alarming, this isolation also hid the violence and suffering produced in the name of ecology. The spatiotemporal experiences in this chapter are vivid with descriptions of people “living among infrastructural ruin” and in a “landscape of strategic blight” with debris, rebar, and pipes left in shambles after the “destruction bureau” came through. This is yet another way that authoritarian power is maintained; suggesting that tracking the “lexicon of infrastructural techniques” (183) is a critical aspect of understanding contemporary China and its full throttle move to an urbanizing life.

Conclusion

Ecological States offers many contributions to ongoing debates about urbanization, sustainability, and inequity, from the genealogy of ecology in China to how we may sidestep traditional structural analyses of social difference through sociospatial and aesthetic analyses. The book forces readers to accept just how important China’s ecological civilization, municipal planning practices, and banal governmental techniques are to both contemporary China and the world. Indeed, the “alignment of ecology and state power in China provides a cautionary tale” (189) for the rest of the world, Rodenbiker argues in the conclusion. Our “new era of ecological state formation” (192) is not benign, and has consequential implications when we take stock of the United Nation’s call for 30% of the earth to be protected areas by 2030 (186–7). This book will help us to ask critical questions about such goals; consider how we might have more equitable outcomes; and avoid “technical fixes as a panacea for myriad environmental problems” (191). *Ecological States: Politics of Science and Nature in Urbanizing China* is a must read for those concerned about environmentalism, sustainability, urbanization, and governance.