

BOOK REVIEW

An Ecological History of Modern China

By Stevan Harrell. Seattle: University of Washington Press, 2023.
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Stevan Harrell's *An Ecological History of Modern China* is a wide-ranging, ambitious, deeply informed book of historical anthropology—an interdisciplinary exploration of the past that maintains a close eye on the present and the future as well. Harrell's narrative of ecological transformation in China during the past eighty years also offers important engagements with social theory, environmental science, and public policy. This lengthy and detailed book, the fruit of almost twenty years of effort (xii), includes a comprehensive bibliography that reflects the best work by historians, anthropologists, and other scholars of the Chinese environment from both Anglophone and Sinophone traditions.

Harrell's interpretation of the past from a vantage point in the social sciences comes across through his emphasis on social-ecological systems models (5), focusing the book on structural contexts that constrain and shape human agency and eventful contingencies. That approach, and the multitude of tables and statistics that support it, are the great strengths of this book. Harrell's writing is clear, colloquial, and even sometimes playful, which lightens what would otherwise be dense reading. With its many charts, diagrams, and footnotes, as well as extensive detail about all aspects of agriculture, water policy, urbanization, and industry in China since 1949, this is a terrific reference work as well as a book of historical narrative and analysis. The bilingual glossary of policies, terms, and slogans is its own reward for readers whose expertise lies outside of environmental politics in the People's Republic.

The first chapter of *An Ecological History* offers an overview of social and ecological regions in China. The rest of the book relates the same chronology three times, revisiting it on each occasion from a different angle. The first instance is in a chapter about the history of interlocking connections between developmentalism (a commitment to economic growth and social improvement), revolution as the Marxist praxis for propelling development, and science as a form of technical knowledge and action that at times has generated friction with revolutionary ideals. Harrell explains how China's ecological history since the middle of the twentieth century has unfolded through dynamic exchanges among these three concepts, though the notion of ecological civilization has partially superseded the vision of revolution in the twenty-first century.

The second telling of PRC history in *An Ecological History*, entitled “Land, Water, and Food,” is an eight-chapter section that tells a story about agriculture that is centered on China’s rural core, and a story about dams and hydrological management that also takes up the whitewater rivers of the mountainous southwest. The chapters are roughly chronological, but the chronologies overlap and repeat, as Harrell explores multiple paths through the broad field of ecological history to tell a complex story. The two dramatic trajectories in this section concern China’s rapid transformation from a food-insecure nation to one whose denizens enjoy diverse, ample, and nutritious diets; and from a place of relatively untrammelled wild rivers to one where no waters flow freely even as floods and droughts remain widespread.

The third historical account, “Cities and Industries,” is a six-chapter section with another intriguing collection of overlapping and echoing timelines. For example, one chapter about industrial production covering the years 1984 to 2015 precedes another about urbanization that spans 1980 to 2022. Part of the argument of each chapter is to make the case for its starting and ending points in terms of policy changes and other landmark events. This section once again limns extraordinary transformations over a short period of time. China changed from a largely rural nation to an urban one, and from an economy of industrial production into a “factory to the world” (Chapter 13), although industrial pollution has persisted through that transformation.

The book’s guiding narrative emphasizes the slow decline of ecological buffers and ecological resilience, and the ways that increasing prosperity has been inseparable from rising ecological precarity in modern China. For example, wetlands become farmland, thereby increasing flood risk even while improving the capacity for feeding China’s growing population. As Harrell explains, today “Chinese people experience plenty as never before, but they rely increasingly on institutional and infrastructural buffers, locking in all scales of ecosystems and rendering them increasingly vulnerable to disturbances” (423). Against this conclusion, Harrell also expresses some optimism about an emerging eco-developmental policy turn that is granting more power to environmental protection agencies and is more responsive to public pressure for clean food, air, and water; and he expresses the hope that China will experience a version of the Environmental Kuznets Curve, which predicts that earlier stages of economic growth are generally associated with environmental degradation, which is then reversed at later stages of growth (3). The book ends by prognosticating a potential ecologically healthy future of population decline, green energy leadership, declining air pollution, reforestation, and emergent sustainable and organic agriculture.

That conclusion aside, this is a book about rising vulnerability as much as it is about expanding prosperity. He explains that “this book is the story of China’s ‘miraculous’ development and of the losses that development has brought. It shows how a country can become both modern and vulnerable, giving its people both prosperity and pollution, a conjunction that raises several important questions” (2–3). The broadly declensionist narrative emphasizes degradation of the natural environment over stories of amelioration and conservation. Even when Harrell describes remarkable successes like China’s rapid departure from food insecurity and improvements to air pollution and deforestation; he consistently returns to examples of ecological decline like water pollution and biodiversity loss; and he offers only limited guidance about how to entrain these conflicting truths into a single story. Although he invokes resiliency, he does not assess it analytically other than emphasizing that more growth means that environments have less capacity to withstand disturbances, adapt to changes, and maintain functions and services. A global and comparative approach would have been

illuminating. I would have liked Harrell to have evaluated China's ecological history relative to other potential Kuznets Curve analogues and to have discussed how China is now outsourcing environmental degradation to other countries.

Like all capacious and ambitious books, *An Ecological History of China* leaves many questions for other scholars to take up. One line of inquiry would bring in agency, politics, resistance, conflict, and power. It would connect Harrell's structural approach to questions about which people have benefitted in what kinds of ways from certain outcomes, and what human forces have shaped those outcomes. These kinds of questions would bring to the surface a more nuanced, more dialectical, and less declensionist approach to ecological transformation. Another direction would focus more on climate and climate change, situating China's ecological history in the context of climatic diversity and its location in large scale and global climate systems like the East Asian Summer Monsoon and the El Niño Summer Oscillation; and exploring how climate change is shaping China's present and is poised to constrain future ecological possibilities. It is of course the sign of a successful book to leave readers wanting to know more about the issues they care about most, and in this way as many others, Harrell's book is commendable.