

Book Reviews



ENVIRONMENT

SCORCHED EARTH: Environmental Warfare as a Crime against Humanity and Nature by Emmanuel Kreike. Princeton, NJ: Princeton University Press, 2021. 538 pages. Hardcover; \$39.95. ISBN: 9780691137421.

In *The Abolition of Man*, C. S. Lewis writes, “What we call Man’s power over Nature turns out to be a power exercised by some men over other men with Nature as its instrument.”¹ Lewis wrote this decades before the fields of environmental history and political ecology became popular; these topics now challenge our tendency to conceptualize nature and culture in dualistic or binary terms, but he understood that it is impossible to separate power over nature from societal power.

In *Scorched Earth: Environmental Warfare as a Crime against Humanity and Nature*, Emmanuel Kreike shows that nature is always an instrument and a victim of war. He argues that scholars conceptualize war as an act of genocide (the intentional effort to destroy a whole nation or ethnic group) or ecocide (the destruction of an ecosystem or species). But this dualistic frame misses the complex reality of warfare that often amounts to what he calls environicide: “intentionally or unintentionally damaging, destroying, or rendering inaccessible environmental infrastructure through violence” (p. 3).

The temporal and spatial scope of *Scorched Earth* is impressive. Temporally, Kreike begins with the early sixteenth-century Dutch Revolt and ends with the First World War. Spatially, he ranges from conflict in the Low Countries of Europe to Spanish conquest of the Americas. Throughout, he shows that, in Western warfare, parties have consistently targeted environmental infrastructure, leading to lasting impacts on both societal and ecological patterns.

Chapters 1 and 2 recount the Dutch Revolt and the Spanish Conquest of America, both in the sixteenth century. Chapters 3 and 4 tell the stories of the Thirty Years War and European conquest of America in the seventeenth century. Chapters 5, 6, and 7 outline the War of the Spanish Succession, the War of the Austrian Succession, and European colonialism in the eighteenth century, when the principles of limited war were adopted by many European nations. Chapters 8 and 9 explain American westward expansion and Dutch conquest of Indonesia in the nineteenth century. Finally, chapter 10 shows that Portuguese colonial conquest and the First World War continued environcidal practices.

Scorched Earth makes several important contributions. Like other environmental histories of warfare, *Scorched Earth* shows the horrors of war for both people and the nonhuman environment. But the sweep of *Scorched Earth* offers something new. Kreike shows that warring parties have consistently destroyed environmental infrastructure—fields, homes, dams, houses, irrigation networks—in order to sustain themselves and to starve their opponents of critical resources or terrorize their opponents into submission. This altered both social/economic practices and ecological processes, often leading to migration, famine, disease, and depopulation. Often attributed to forces of nature, these tragedies are shown by Kreike to be more accurately attributed to environicide.

The sweep of Kreike’s analysis also shows the vast gap between the rules of war and the practice of war. Beginning in the eighteenth century, armies adopted strict rules prohibiting rape, looting, and violence against civilians. Repeatedly, these practices continued. *Scorched Earth* expands our understanding of war’s collateral damage by emphasizing the destruction of environmental infrastructure alongside more-direct human atrocities.

The sweep of the book does create some challenges. For example, in some chapters, Kreike’s detailed accounts demonstrate his argument convincingly. In other chapters, readers must trust his analysis through impressionistic accounts. But taken together, the ten chapters make a compelling case.

The more significant question in *Scorched Earth* is the value of the term “environicide.” Kreike uses it in part to challenge the notion that “total war,” namely, war in which “anything and everything is the object, subject, and means of war” (p. 17), is exclusively a modern phenomenon or dependent on weapons of mass destruction. In this, he certainly succeeds. But in parts of the book, then, environicide is essentially a synonym for total war:

Environcidal war was total war that triggered famine, disease epidemics, massive population displacement, and the devastation of people’s livelihoods and ways of life and was as destructive to humanity as it was to Nature. The history of total war as environicide highlights ... [why it] should be condemned as a crime against humanity and Nature. (p. 417)

This is a valuable insight that helps us understand how destructive warfare is of both humans and non-human nature.

Yet he also introduces the term to mean something broader than total war, namely that warfare with limiting rules of engagement still destroys environmental infrastructure that people need to rebuild after a conflict. Using it this way suggests something so broad that it is difficult to imagine any warfare that does not constitute what he describes as “a crime against humanity *and* nature.” To the extent that international law does not treat all warfare as criminal, environicide clearly needs boundaries.

But the problems highlighted above are minor in evaluating *Scorched Earth*. It is a remarkable work of scholarship that should make its way into every graduate course on the history of military conflict.

The book has enormous value in thinking critically about contemporary warfare. All United Nations member states are signatories to the Geneva Conventions, which are intended to protect civilians, other noncombatants, and prisoners of war. If followed, the conventions would ensure that signatory nations do not carpet bomb cities as the United States did in the Second World War, deploy the kind of chemical weapons used in the First World War, and summarily execute prisoners. Appealing to these conventions lets civilian and military leaders tell their citizens that they engage in limited war with minimal collateral damage. Kreike’s analysis should make us question the meaning of limited war which invariably causes direct human collateral damage and indirect human collateral damage caused by the destruction of environmental infrastructure. Indeed, *Scorched Earth* demonstrates that, however compelling just war theory might be in concept, fully just prosecution of war does not happen in practice.

The book also helps build the conceptual framework needed for Christian reflection on sustainability. Christian theologians and ethicists, particularly since Lynn White Jr.’s 1967 essay “The Historical Roots of Our Ecological Crisis,” have challenged dualistic thinking about humans and the nonhuman environment. Kreike’s descriptive analysis deepens our understanding of human embeddedness in the non-human creation, showing that Christian ethics itself should not be bifurcated in any simple sense between *social* ethics and *environmental* ethics.

Note

¹C.S. Lewis, *The Abolition of Man* (New York: HarperCollins, 2001), 55.

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HISTORY OF SCIENCE

GEOGRAPHIES OF KNOWLEDGE: Science, Scale, and Spatiality in the Nineteenth Century by Robert J. Mayhew and Charles W. J. Withers, eds. Baltimore, MD: Johns Hopkins University Press, 2020. 272 pages. Hardcover; \$54.95. ISBN: 9781421438542.

Around the 1970s, historians began embracing what came to be called the “constructionist” view of the development of scientific knowledge, which emphasized the particulars of local circumstances, people, and politics. On this view, scientific knowledge is thus constructed, not discovered. This process, moreover, is not the work of the individual genius but manifestly a communal and cooperative enterprise. The social construction of science thus denotes the view that scientific knowledge is not solely an autonomous, rational human production, but, rather, tangled directly to social interests and conditions. Influenced by the broader postmodern rejection of unmediated knowledge, the social constructivist relativization of scientific knowledge had direct implications for the way in which one defined the relationship between science and religion, in that it has forced scholars to stop privileging the scientific narratives of conflict with faith, and thus challenged prevailing grand narratives of scientific progress, most conspicuously promulgated by George Sarton, often considered the father of the discipline of the history of science.

Historian and sociologist of science Steven Shapin has been one of the leading practitioners of constructivist historiography. In now a celebrated article, Shapin argued that the early man of science “did not occupy a single distinct and coherent role in early modern culture.” Everywhere the social role of the man of science was heterogeneous, the pursuit of natural knowledge adventitiously attached in all sorts of ways to preexisting roles.

The notion that science and scientists are not isolated from their wider cultural context had enormous consequences. Critical theorists and sociologists of knowledge like Shapin offered a helpful corrective, revealing a kind of dialectic where science, literature, and culture are understood to borrow freely from each other. Focusing less on the structure than ethos of scientific communities in the early modern period, Shapin relativized and localized the central figures, themes, and institutions of the so-called scientific revolution. Shapin’s scholarship, and those who