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Review: The Great Acceleration: An Environmental History of the Anthropocene since 1945

By John Robert McNeill and Peter Engelke

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McNeill, J.R., and Engelke, P. *The Great Acceleration: An Environmental History of the Anthropocene since 1945.* Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 2016, 275 pp. ISBN 978-0-674-54503-8, paperback. US$19.95.

This brief book, *The Great Acceleration: An Environmental History of the Anthropocene since 1945,* starts by claiming that the Holocene is over and som

ething new has begun: the Anthropocene. A new stage in Earth´s history, one in which humankind has emerged as the most powerful influence on global ecology. After giving a full page presenting different reasons to date the Anthropocene anywhere between 1.8 million years away to the eighteenth century J.R. McNeill and Peter Engelke adopt the more recent timing of the Great Acceleration since 1945.

Regardless of this, the book starts from the earliest timing of the Anthropocene with human control over fire, then jumps to the advent of animal husbandry and agriculture. Two pages later we are in late eighteenth-century England, where the harnessing of coal exploded the constraints of the organic energy regime. Then follows a dismal history of the environmental and health effects of the exploding use of fossil fuels, and an equally dismal story of how the rosy expectations of nuclear energy withered away with Chernobyl and Fukushima Daiichi accidents, the first one of which may have caused nearly one million deaths worldwide. Unfortunately, the authors' claim that hydropower releases no greenhouse gases is not true, as rotting vegetation in hydropower reservoirs are a large source of methane, a more potent greenhouse gas than carbon dioxide. Methane seems also to be the dividing line between the proponents of an early anthropocene, who consider the carbon dioxide and methane emissions from large-scale agriculture and animal husbandry as its trigger, and proponents of a more recent timing related to large scale combustion of fossil fuels.

The book goes on to deal with the link between a changing climate and biodiversity and provides yet another history of climate science. Climate change also adds urgency to protect biodiversity, as there are now so many human dominated landscapes that many

species attempting to flee a warming climate will have no migratory option whatsoever. This depressing story continues in the next chapter dealing with urbanization, but it provides at least some hope in the story of greening cities reducing their ecological footprint through improved tram systems, cycling infrastructure and even producing some of their food themselves. This is though just a small glimpse of hope before the full frontal onslaught on nature provided by the cold war and militarization. But at least this chapter ends with some hope through the environmentalism of the poor, institutionalizing and mainstreaming of environmentalism. The book concludes with a small glimpse of hope arguing that the reality of the Great Acceleration has already begun to seep into the humanities and social sciences and something of an "environmental turn" seems afoot.

I would recommend this book for anyone who needs a short introduction to the Great Acceleration, the escalation of human impacts on the environment since 1945.

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