@NOZ@

Michael Boyden Uppsala University, Sweden

Book Review: Christophe Bonneuil and Jean-Baptiste Fressoz, *The Shock of the Anthropocene: The Earth, History and Us,* trans. David Fernbach (London, New York: Verso, 2015), 306 pp.



By now, anyone in their right mind knows what it takes to avert environmental apocalypse: all we need to do is pollute less, emit less carbon dioxide into the atmosphere, consume less, produce less, procreate less, and so on. However, as the German sociologist Niklas Luhmann pointedly noted in his book *Ecological Communication* (first published in 1985, translated into English in 1989), "whoever puts the problem this way does not reckon with society, or else interprets society like an actor who needs instruction and exhortation" (Luhmann, 133). In other words, to avoid getting bogged down in misdirected criticism, utopian or fatalistic scenarios about the end of the world, our solutions to the environmental problems of the twenty-first century should somehow be commensurate with the dynamics of an increasingly complex and interconnected world society. While this realization led Luhmann to construct a highly abstract and, according to some critics, rather unwieldly theory of modernity apparently immune to falsification, recent scholarship in the environmental humanities has adduced a lot of fascinating empirical data to show why humans continue to destroy their own life world, apparently much against everyone's advice.

The Shock of the Anthropocene by Christophe Bonneuil and Jean-Baptiste Fressoz, two historians currently working at the Centre Alexandre-Koiré at the Ecole des hautes études en sciences sociales (EHESS) in Paris, is a highly incisive contribution to this rapidly growing body of environmental research. The original title of the book, somewhat hastily translated from the French by David Fernbach, reads L'Evénement Anthropocène (the Anthropocene event), which hints at the authors' intellectual indebtedness to the work of, among others, Michel Serres and Bruno Latour (and via Latour, Gilles Deleuze whose philosophy of the event has been very influential in French philosophy). This conceptual framework, combined with a commitment to thorough quantitative research, gives The Shock of the Anthropocene an edge in relation to some of the conceptually and empirically less grounded debates in the Anglo-American environmental humanities. But what makes it a most stimulating book, in the present reader's view, is the authors' willingness to point out the tenacity of what they call the "grand narrative" of the Anthropocene even in the work of their intellectual mentors and allies, including Latour and such leading scholars as Dipesh Chakrabarty.

What is that grand narrative of the Anthropocene? This can be stated rather simply: Overnight, as it were, we have entered a new geological era as a consequence of our tinkering with the environment. Only now, thanks to advances in climate science, we are coming to realize the implications of this potentially disastrous development,

starting with the generalized use of fossil fuels during the industrial revolution but undergoing a massive "acceleration" after the Second World War. To call a halt to this man-induced environmental degradation in the Anthropocene, the grand narrative tells us, we need to develop technologies allowing us to counter global warming by technologically manipulating the climate. The authors do a good job explaining to readers not at home in the scientific literature that there can be no doubt that anthropogenic climate change has produced, as they put it, "a new situation for humanity, a new human condition" (24). What is also clear is that something needs to be done if we want to avoid the complete depletion of our natural resources and, eventually, the annihilation of the human race. So what is wrong with the Anthropocene narrative? Why not put our trust in the scientists who are now offering new ways of optimizing the atmosphere through technology? While the authors are clearly appreciative of the accomplishments of climate science, which they outline in remarkable clarity, the red line running through The Shock of the Anthropocene is that the question as to how we should deal with an endangered environment is too encompassing to be completely delegated to scientists.

Concretely, the authors see two problems with the Anthropocene narrative as brought to us by the Earth Sciences. First, while it ostensibly displaces the modernization narrative, the "anthropocenists," as Bonneuil and Fressoz call the climate scientists, in fact reproduce that narrative by suggesting that we are living in an age of unprecedented environmental reflexivity. This narrative of environmental modernization is no less teleological and therefore no less of a "fable" (77) than the one it displaces. To be sure, our forebears did not have the same scientific tools as we do today to measure the transformation of the earth's ecosystems, but this does not mean that they were completely ignorant about the implications of environmental deterioration. Drawing on a vast array of historical sources and statistics, Bonneuil and Fressoz convincingly document that the idea of a sudden environmental awakening is a "scientistic illusion" (287). The second problem besetting the Anthropocene narrative is that, by discarding a long history of politically charged environmental debates, it serves to depoliticize that history, thus obscuring the institutional and moral blockages that have prevented us from managing the environment in a more sustainable fashion in spite of frequent warnings about the pernicious consequences of pollution, waste, and economic globalization. Rather than as a kind of ecological enlightenment, therefore, Bonneuil and Fressoz explain the onset of the Anthropocene in terms of the "schizophrenic nature of modernity" (197), which has allowed us to exploit the environment in full awareness of its devastating implications for the survival of humanity itself.

Provocatively, Bonneuil and Fressoz argue that the Anthropocene narrative is intimately tied up with the emergence of what they, by analogy with Michel Foucault's influential concept of biopower, call a new "geopower" (87ff.). In this case, we are no longer dealing with nation-states controlling their populations through public health policies, risk management, economic liberalism, and the like; instead, the entire biosphere has become an object of knowledge and governance. Rather than impartial

scientific instruments, the technologies developed by the anthropocenists, such as geoengineering and synthetic biology, embody this "nascent geopower" (91). It is no coincidence, the authors suggest, that some of these technologies were developed in a Cold War context to confront the threat of nuclear annihilation. Neither is it a coincidence that the anthropocenists like to invoke a market logic when proposing to "optimize" the climate or when computing the environmental "costs" in terms of biodiversity "credits." What this shows is that the dominant Anthropocene narrative has facilitated the construction of a new conception of nature derived from neoliberal economics. Where it once imposed natural constraints on unbridled economic development and growth, the environment has now become yet another commodity on the market, or as Bonneuil phrases it elsewhere, it has become "liquefied" (Bonneuil 2015).

The consequences of this naturalization of the market and attendant denaturalization of nature, the authors insist, are disastrous. In the free market logic of the green economy, poor territories and the weaker sections of the population will be hit hardest by environmental policies and conservation will become the privilege of the wealthy nations. Given this, should we not do away with the term Anthropocene, which after all literally means "the age of man" and thus displays the kind of scientific hubris that Bonneuil and Fressoz target in their critique? Rather than replacing a widely used term that in itself does not differentiate between more and less reflexive forms of modernization, the authors propose to create a more nuanced narrative of the Anthropocene that factors in the long history of class struggles obscured by the grand narrative of the scientists. The authors outline several "grammars" of environmental reflexivity drawn from domains such as medicine, psychology, natural history, chemistry, and thermodynamics - all of which reveal that the current understanding of the environment as a market subject to optimization is neither uncontested nor inevitable. The main task of the environmental historian, therefore, is to repoliticize ecological debates by drawing attention to the power dynamics inherent in environmental policies. By thus restoring the long history of environmental reflexivity, the authors at the same time hope to reground the humanities, which by turning away from the natural world and leaving it to the scientists have indirectly contributed to "the great separation between environment and society" (33).

It is to be hoped that Bonneuil and Fressoz's call for a rigorous environmental humanities to critically examine the geopolitical dimension of the Anthropocene will be picked up by academics in the English-speaking world. If the present reader is to list one point of criticism, it would have to be that the authors are so emphatic about the excesses of (mainly American) consumer society that they run the risk of creating their own grand narrative, which might in turn eclipse from view alternative perspectives. For instance, the rise of China as an economic giant is mentioned as a mere afterthought in a footnote (252, n. 100) to the chapter on the "Capitalocene," although a truly "global reading" (228) would probably require that we grapple with such state-driven capitalism if the analysis is to be more than a history of Western capitalism and colonial imposition alone. Similarly, given the divergent ecological footprints of some countries

Vol 7, No 2

in the Global South, one wonders whether the "ecological gap" (250) between Western debtor and non-Western creditor nations is as straightforward as the book suggests. Finally, the authors' forceful critique of technocratic scientism might easily tip over into a paranoid distrust of an all-pervasive geopower that could serve to reify the division between the sciences and the humanities that they are so eager to dismantle. But, on the whole, *The Shock of the Anthropocene* constitutes a serious engagement with ongoing debates in the Earth Sciences as well as a crucial reminder that the solution to our ecological problems requires not just new technologies but also a public debate on how we deal with our threatened environment.

Works Cited

Bonneuil, Christophe. "Une nature liquide? Les discours de la biodiversité dans le nouvel esprit du capitalisme. In: Frédéric Thomas (ed.). *Le pouvoir de la biodiversité. Néolibéralisation de la nature dans les pays émergents*. Paris: Éditions de l'IRD-Quae, 2015. 193-213.

Luhmann, Niklas. *Ecological Communication*. Trans. John Bednarz Jr. Cambridge, UK: Polity Press, 1989.