Kent Linthicum
Georgia Institute of Technology
klinthicum3@gatech.edu
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"Fueling the Anthropocene"

The dark satanic mills of the Anthropocene rest on a foundation of settler-colonialism, slavery, oil, plastic, nuclear weaponry, and many, many other elements, but those mills were catalyzed by coal. The other facets of this proposed geologic epoch, defined by visible human effect on the rock record, are still integral: the European demand for cotton in the seventeenth and eighteenth centuries drove greedy soldier-capitalists into India who slowly monopolized and eventually colonialized those people and lands; industrialization was purchased with the capital made from cheap slave agriculture conducted on lands stolen from the Chickasaw, Choctaw, Creek, and Cherokee, among many others; petroleum continues to shape urban, suburban, and rural areas creating literal landscapes of wealth and poverty. Nor should the significance of coal be used to suggest that industrialization or colonization would not have happened without it. The horrors of Western Imperialism would have likely occurred, in some fashion, in the absence of coal. Yet, without the easy energy of coal the manufacture of iron, glass, and steel would have been much more difficult, and would have required actual acres of biomass, rather than the ghost acres of coal. And the energy used to power steam engines in factories, ships, and trains would have had to come from other sources, water, wind, labor, or biomass again. And, likely it would be much more difficult to ultimately refine petroleum. The Anthropocene as we know it would not exist without fossil fuels, would not exist without coal. Human life can subsist on a scant handful of biomass for food and heat. But the Anthropocene needed the pressurized and purified carbon of ancient periods to power its mills. As Heidi Scott notes: "Coal is the lead author of the Anthropocene" (Scott 175). Yet, the mere existence of coal does not imply the Anthropocene either.

Coal has been used by people throughout history. Only the British, in the late eighteenth and early nineteenth centuries, turned coal into an industrial fuel. Why the Industrial Revolution happened in Britain rather than anywhere else in the world with access to coal—like China, India, Russia, South Africa, Australia, North America—has been one of the most complex historical debates of the past century. Importantly, Britain has had coal for longer than it has had humans, yet only in the Industrial Revolution and the subsequent Victorian period did the British embrace coal as their dominant source of energy. Therefore, it is important to recognize, as noted by Dipesh Chakrabarty, "Human civilization surely did not begin on condition that, one day in his history, man would have to shift from wood to coal and from coal to petroleum and gas" (Chakrabarty 216). Rather, at some point in the eighteenth and nineteenth centuries, the British decided to adopt coal despite their historical aversion (Cavert 129). In part this shift was a product of desire for greater cotton profits by mechanizing or undercutting the power of labor (Beckert; Malm, *Fossil Capital*). These histories contradict the just-so story of coal, the idea that it was the only and obvious fuel deployed by a cunning, scientific people against nature. As both LeMenager and Malm separately have argued energy systems are influenced by and influence the cultures that use them (LeMenager 4; Malm, *Progress* 127–32). In this fashion, tracing the cultural history of coal, its aesthetics within an industrializing system is an opportunity to approach humanities scholarship in the new ways, as necessitated by Anthropocene crises

(Davies 62; Menely and Taylor 4). Coal—financed by colonization, slavery, and genocide—provided the fuel for industrial capitalism, destabilizing previous modes of being, and reading for it now can reveal the roots of the modern romance with fossil fuels.

The Anthropocene, though, should not be renamed the Petrocene. Naming the Anthropocene is an inevitably fraught task: many have pointed out the ways the 'anthropos' in the 'cene' implicates *all* of humanity rather than *just* the perpetrators of the current climate crisis. Who or what catalyzed the crisis is also contentious with arguments made for capitalism (Malm and Hornborg; Moore), settler-colonialism (Ghosh; Whyte; Davis and Todd), racism (Mirzoeff; Yusoff), the English-speaking world (Bonneuil and Fressoz), speciesism (Haraway), slave/plantation economics (Haraway), economic growth (Norgaard), the uneven distribution of technology (Hornborg), etc., as *the* primary cause of the Anthropocene. None of these criticisms are wrong. They are all correct in various ways, starting, stopping, restarting, merging, repelling each other over a brief span of human history. And as noted above, Britain's industrial revolution—its adoption of coal, advances in textile and iron manufacturing, and developments in transportation—did not happen alone; it was part of a system of energy and commodities including "South American silver, Caribbean sugar, North American cotton, African slaves, and the consumer goods that flowed into and out of the advanced population centers of northwest Europe, China, and India" (Davies 95–9). Yet, dating the Anthropocene so close to its inception will always be a challenge, but that does not mean the concept is useless.

Selecting a single moment of time for the inception of the Anthropocene will always be difficult due to the ways that sediments are deposited, shifted, and altered over time through geologic *and* anthropomorphic forces (Edgeworth, et al.). Understanding the Anthropocene as occurring at different times in different places can help resolve some of the tensions in dating the period (Davies 55). Steve Mentz argues "a pluralized Anthropocene" offers "an agglomeration of partial overlapping and sometimes conflicting perspectives, replacing the singularity of capital-A Anthropos" (Mentz). Understanding coal as part of a pluralized Anthropocene—or one divided into multiple ages, e.g. the Carbonian age of the Anthropocene epoch—systematizes one reading of the eighteenth and nineteenth century world where coal moves from its preindustrial immaturity into a seat of power. Coal as a locus for the eighteenth and nineteenth centuries recovers a cultural system that was finding ways to inoculate itself against the externalities of its sources of power, in a fashion mirrored today. The aesthetics of coal existed before the iconic industrial factory belching black clouds. As with other fossil fuels, coal is somehow neither a subtext nor a symptom to be extracted from texts; coal is a super-structure for the texts it helped produce, while also being the atmosphere of the texts then and now (Heringman 62–3). Coal—through an aesthetics of fossil fuels that would come to dominant the twentieth and twenty-first centuries—recedes into the background becoming "obliquely omni-present" (Hensley and Steer 66). So, while coal should not be the sole focus of early-Anthropocene studies, systematizing coal's role in the material and cultural network of the long nineteenth century offers a new way of viewing the first petro-cultures. By recovering the aesthetics and rhetorics of coal, we can come to understand how people accommodated and embraced such a fuel, and ultimately how fossil fuels might be limited and shunned.

Works Cited

Beckert, Sven. *Empire of Cotton: a Global History*. Alfred A. Knopf, 2014.

Bonneuil, Christophe and Jean-Baptiste Fressoz. *The Shock of the Anthropocene: the Earth, History and Us*. Translated by David Fernbach, Verso, 2017.

Cavert, William M. *The Smoke of London: Energy and Environment in the Early Modern City*. Cambridge University Press, 2016.

Chakrabarty, Dipesh. "The Climate of History: Four Theses." *Critical Inquiry*, vol. 35, no. 2, Winter 2009, pp. 197–222. doi: 10.1086/596640

Crutzen, Paul J. "Geology of Mankind." *Nature*, vol. 415, no. 23, 2001, p. 23, doi: 10.1038/415023a

Crutzen, Paul J. and Eugene F. Stoermer. "The 'Anthropocene.'" *Global Change Newsletter*, vol. 41, May 2000, pp. 17–8. International Geosphere-Biosphere Programme.

Davies, Jeremy. *The Birth of the Anthropocene*. University of California Press, 2016.

Davis, Heather, and Zoe Todd. "On the Importance of a Date, or Decolonizing the Anthropocene." *ACME: An International E-Journal for Critical Geographies,* vol. 16,4, 2017.

Edgeworth, Matt et al. "Diachronous Beginnings of the Anthropocene: The Lower Bounding Surface of Anthropogenic Deposits." *The Anthropocene Review* vol 2, no. 1, 2015, pp. 33–58.

Ghosh, Amitav. *The Great Derangement: Climate Change and the Unthinkable*. The University of Chicago Press, 2016.

Haraway, Donna. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin." *Environmental Humanities*, vol. 6, no. 1, 2015, pp. 159–165, doi: 10.1215/22011919-3615934

Hensley, Nathan K. and Philip Steer. "Signatures of the Carboniferous: The Literary Forms of Coal" in *Ecological Form,* edited by Nathan K. Hensley and Philip Steer, Fordham University Press, 2019, pp.63–82.

Heringman, Noah. "The Anthropocene Reads Buffon; or, Reading Like Geology." in *Anthropocene Reading,* edited by Tobias Menely and Jesse O. Taylor, The Pennsylvania State University Press, 2017, pp. 59–77.

Hornborg, Alf. "The Political Ecology of the Technocene." In *The Anthropocene and the Global Environmental Crisis*, edited by Clive Hamilton, François Gemenne, and Christophe Bonneuil, Routledge, 2015.

LeMenager, Stephanie. *Living Oil: Petroleum Culture in the American Century*. Oxford University Press, 2014.

Malm, Andres. *Fossil Captial*. Verso, 2016.

Malm, Andreas, and Alf Hornborg. "The Geology of Mankind? A Critique of the Anthropocene Narrative." *The Anthropocene Review*, vol. 1, no. 1, Apr. 2014, pp. 62–69, doi:10.1177/2053019613516291.

Menely, Tobias, and Jesse O. Taylor. *Anthropocene Reading: Literary History in Geologic Times*. The Pennsylvania State University Press, 2017.

Mentz, Steve. *Break Up the Anthropocene*. University of Minnesota Press, 2019, doi: 10.5749/9781452963518

Mirzoeff, Nicholas. "It's Not the Anthropocene, It's the White Supremacy Scene; or, The Geological Color Line." *After Extinction*, edited by Richard Grusin, University of

Minnesota Press, 2018. pp. 123–149.
Moore, Jason W. *Capitalism in the Web of Life: Ecology and the Accumulation of Capital.* Verso, 2015.
Norgaard, Richard. "Escaping Economism, Escaping the Econocene." in *Economy of Sufficiency*, edited by Uwe Schneidewind, Tilman Santarius and Anja Humburg, Wuppertal Institute for Climate, Environment and Energy, 2013, pp. 44–52.
Scott, Heidi C. M. *Fuel: An Ecocritical History*. Bloomsbury Academic, 2018.
Yusoff, Kathryn. *A Billion Black Anthropocenes or None*, University of Minnesota Press, 2019.
Whyte, Kyle Powys. "Indigenous Climate Change Studies: Indigenizing Futures, Decolonizing the Anthropocene." *English Language Notes*, vol. 55, no. 1-2, 1 Mar. 2017, pp. 153–162, doi: 10.1215/00138282-55.1-2.153