

Review of: "The Anthropocene Borderline Problems"

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Potential competing interests: No potential competing interests to declare.

I will admit I am unfamiliar with the term "Borderline Problem" but I did find the article interesting as a review of current thinking on the nature of the "Anthropocene".

I was curious about the idea that some have suggested that the Anthropocene could be regarded as having begun as late as the mid-20th century. My understanding was that the era/epoch/event was based upon the point at which humans began affecting the environment at a greater rate than natural events. If that is true, wouldn't the point of origin coincide with the main thrust of the industrial revolution, circa 1820? While the origins of the revolution can be found in the mid-1600s, from 1820ish industrial output (as measured by GDP and through transformations in mass transport and communication) surges. From this point we, as a species, have more impact globally, than geological (or other biological) entities.

In terms of leaving a geological signature, as other epochs are sub-divided, maybe the 1950s is reasonable, however, I would presume the effects of CO2 emissions would be evident, much earlier than that. In that regard, an interesting point to consider would be residue of nuclear weapons testing (1940-1960s), which is evident in atmospheric and other chemistry and might validate a 1950s point of origin.

Thinking more broadly, if we assume that humanity was somehow extinguished, what would be the geological record of our existence on Earth? A brief geological horizon full of our pollution? If a brief horizon, would it be considered an epoch? Probably not. An event, seems more fitting, like the PETM excursions in the Eocene. In that regard, I would have preferred the article to have some geological context for the idea of event, epoch or era. What would one expect to find if one was looking at it from some distant point in the future? For me, that would have framed the discussion. However, thought-provoking, nonetheless.