

anticolonial modernizers were not simply derivative mimics. Chakrabarty suggests that the key question driving the Capitalocene argument—How should we distribute responsibility?—moves too quickly to a human frame rather than grappling seriously with the planetary. What might an appreciation for the spiritual and emancipatory aspects, and the originality, of non-Western developmentalism do for our efforts today to grasp the depth of our predicament?

Author's Response

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I am grateful to colleagues for both the appreciative and critical remarks they have offered. My response focuses on four broad areas of inquiry: questions relating to “the planet,” capitalism, modernity, and the political.

Questions of the Planet. By using the Italian poet Giacomo Leopardi's 1835 poem *La Ginestra*, Ollett expands the canvas to show that different kinds of cosmological thinking including Leopardi's from the early nineteenth century act as precursors of what I call planetary thinking. This is a generative suggestion. However, I am not persuaded that Ollett's claim that Leopardi uses “the planet” “in Chakrabarty's strict sense of the word” (594) is right. The category “planet” in my usage refers to the “earth system” of Earth System Science. For example, I write that “The intensification of globalization and the consequent crises of global warming . . . have ensured that the planet—or more properly . . . the Earth system” etc. (3–4, emphasis added). Later I describe the planet as “a dynamic ensemble of relationships . . . an ensemble that constitutes the Earth system” (70, cf. 76).

This concept of “earth system” comes from Earth System Science.²¹ While the roots of this science go back to the nineteenth century, it would have been impossible to develop it without modern technology and superpower competition in space. As I show in chapter 3, it is a Cold War science that was formalized by NASA in the 1980s. The “earth system” is an abstraction of scientists. We encounter the “earth system” in thought, I said, as “something that is the condition of our existence” but is not in any “communicative relationship” to us (70). It does not address itself to humans, though humans—in the present crisis—seek to understand it. In that sense, there is no “mutuality” between the “planet” or the “earth system” and humans (70 and chap. 8).

²¹Tim Lenton, *Earth System Science: A Very Short Introduction* (Oxford: Oxford University Press, 2016), 1.

Leopardi's poem, on my reading, is not an illustration of my idea of planetarity. His poem turns around a human-nature opposition. It is about a nature that is hostile to humans, a harsh nature that can destroy human civilization at any moment. Human solidarity can come about only from abjuring their foolish pride in progress and wisely acknowledging their own smallness, frailty, and insignificance in the face of the harshness of nature.²² The passage that Ollett cites indeed embodies a form of cosmological thinking informed by contemporary science, but Leopardi's naked-eye vision of the cosmos anticipates more the "blue marble" globe of 1972 than the "earth system" of Earth System Science (79). The earth system is not Leopardi's "nature."

Some of Ackerly's criticisms are relevant here too. She claims that "many people raised in Indigenous knowledge systems are not newly aware of the planet as Chakrabarty conceives of it" (599). There is no question that there have been and are many forms of planetary thinking in human history. But nobody could have known of the "earth system" as posited by Earth System Science—i.e., my category "planet"—before this science and its precursors came into being. To say this is not to dishonor or dismiss other traditions and forms of planetary thought.

Ollett makes a thoughtful and critical observation when he writes that in my book "the world outside Europe appears, often in a critical role, but almost never as providing intellectual or moral resources for rethinking our relationship to the planet" (596). This is true. But I did make a remark on this issue—not in self-justification but in self-awareness. I cite it here to explain further the nature of the exercise I undertook in this book:

most if not all of the scientists who have so far taken it upon themselves to explain to the general reader the problem of planetary climate change are from the so-called West. This may very well say something about the historical capacity of the once-imperial West to produce and speak on behalf of "universals." . . . There is no denying that this book comes out of the public sphere around the question of global warming that the Western academy has created. (234n11)

Questions of capitalism. Both Getachew and Pitts raise the question of the relationship between capitalism and the planet. Capitalism is a difficult word to define. But, loosely used, it is a powerful one, connoting the worlds of high finance, global economic division of labor, the connected global economy, rampant consumerism, and so forth, and all the unequal relationships that these entail. The "globe" and "the planet" are connected entities in my book, not mutually opposed. I argue that it is the intensification of capitalist globalization from the 1950s to the present (the period of Great Acceleration

²²See John Alcorn and Dario Del Puppo, "Giacomo Leopardi's 'La ginestra' as Social Art," *Modern Language Review* 89, no. 4 (Oct. 1994): 865–88. See Giacomo Leopardi, "Wild Broom: Or, The Flower of the Desert," trans. Stephen J. Willett, *Arion* 23, no. 1 (Spring/Summer 2015): 27. This is a different translation from the one Ollett uses.

in human history) that brings the news of the planetary—global warming, anthropogenic climate change, sea level rise, loss of biodiversity—out of the domain of specialist knowledge into the domain of the everyday. It is important not to lose sight of this connection (14, 18, 80, 85).²³ As I say in the introduction, the “earth system” today is broken in part because of the reach of human agency via proxies such as the technosphere or excess CO₂ in the atmosphere; it is in that sense that humans have become a planetary force. For this reason, it would be somewhat inaccurate to say with Getachew that “the globe of global warming is concerned with earth systems far outside of human agency” (601). Getachew’s claim that “the internal constitution of human civilization and the attribution of responsibility to one segment of humanity is inconsequential” (602) is not true from a planetary perspective. If my argument is right, then the emergence of the planetary perspective itself was one of its consequences! My book does not deny the role of capitalism, I simply claim that the category “capital” and the five-hundred-year-old history of European empires, global capitalism, modern slavery, racism, and so on are a necessary but insufficient framework for comprehending the scale and the depth of the human predicament today (20, 35, 36, 40, 42, 44, 57). The whole book is in a sense an elaboration of that proposition.

Questions of modernity. Ackerly’s observation that I “never abandon the modern approach” (598) is fair. I also agree that there is room for a deeper engagement with Indigenous traditions. But I am surprised that she incorporates me into a “we” whose thoughts reflect “a settler-colonial academic mindset (regardless of critical and postcolonial orientations within settler-colonial academe)” (600). That I have spent my doctoral and post-PhD years in university systems that had their origins in settler-colonial societies is indisputable. But there were also my fundamentally formative years in postcolonial India, a country that was part of the British Empire but never a settler-colony. One of my reasons for valuing modernity and the Enlightenment has always been the fact that B. R. Ambedkar, the great leader of the Dalits, demanded more, not less, of European Enlightenment and modernization in aid of his emancipatory politics. He even once wrote, using words that betray certain prejudices we may no longer share:

Machinery and modern civilization are . . . indispensable for emancipating man from leading the life of a brute, and for providing him with leisure and making a life of culture possible. . . . A society which does not believe in democracy may be indifferent to machinery and the civilization based upon it. But a democratic society cannot. . . . The slogan of a democratic society must be machinery, and more machinery, civilization and more civilization.²⁴

²³See also Dipesh Chakrabarty, “The Chronopolitics of the Anthropocene: The Pandemic and Our Sense of Time,” *Contributions to Indian Sociology* 55, no. 3 (2021): 324–48.

²⁴Quoted in Mukul Sharma, *Caste and Nature: Dalits and Indian Environmental Politics* (New Delhi: Oxford University Press, 2017), 141.

Ackerly's comment made me wonder if we should think of Ambedkar also as a victim of a "settler-colonial mindset," albeit not an "academic" one.

There is a lot to learn, going forward, from Indigenous histories and practices. This is not in doubt. But there are some well-meaning troubling questions as well: Can Indigenous land-management techniques feed eight or ten billion people?²⁵ What I find sobering, if not chilling, is the devastating honesty with which Déborah Danowski and Eduardo Viveiros de Castro describe the nature of indigenous thinking as a "resource" in the fight against climate catastrophe: "It is in 'a post-catastrophic' time, or, if one wishes, in a *permanently diminished human world*," they write, that "the generally small populations and 'relatively weak' technologies of indigenous peoples and so many other sociopolitical minorities of the Earth could become a crucial advantage and resource."²⁶

Questions of the Political. If Ackerly's is an externalist critique of my book, Pitts and Getachew critique it from within its own terms. I am grateful for their readerly empathy. Getachew agrees that thinking the planetary remains a task of political thought. Pitts sees one value of the book in its attempt to show "the depth of our predicament" (608). The cascade of problems ranging from planetary warming to the loss of biodiversity is indeed something like a wicked problem, a problem you can diagnose but not easily solve. Most policy and technological prescriptions address the problem piecemeal while humanists propose solutions that are often so total—overturn capitalism and/or modernity—that they are not practical. I did not write a practical book either. The fact that specialists of Earth System Science were thinking of humans as possessing a geological agency and as capable of acting as a planetary force gave me a sense of how the human condition had changed even from the time Hannah Arendt famously contemplated this question.

In wanting to address that question again, I found a starting point in thinking critically through the categories of my discipline, history. That may not have been a bad place to begin. From a purely humanocentric point of view, humans have so far done well by developing academic forms of knowledge—disciplines—that carved up the entangled reality of the world into so many domains of specialization, each with their own combination of insight and blindness. Karl Jaspers called such thought "departmental thinking."²⁷ But the planetary problems we face call for understanding that is holistic.

²⁵The argument from within Australian history is put forward in a masterful, if a little romantic, way by Bill Gammage, *The Biggest Estate on Earth: How Aborigines Made Australia* (Sydney: Allen & Unwin, 2011).

²⁶Déborah Danowski and Eduardo Viveiros de Castro, *The Ends of the World*, trans. Rodrigo Nunes (Cambridge: Polity, 2017; first published in Portuguese in 2014), 95, emphasis added.

²⁷Karl Jaspers, *The Atom Bomb and the Future of Man*, trans. E. B. Ashton (Chicago: University of Chicago Press, 1963), vii.

Earth System Science, an interdisciplinary branch of knowledge, moves in that direction. These problems also call for a conversation between the sciences and humanistic knowledge. That is where I begin—with a critique of “the climate of history” (chapter 1)—and I end up with a distinction between the globe (a humanist and historical category) and the planet, an earth system now significantly modified by human institutions and technologies that constitute a force of planetary proportions. I thought of this exercise, as Pitts points out, as similar to Jaspers’s way of addressing an “epochal consciousness,” a mode of thinking he deliberately characterized as “pre-political,”²⁸ an awareness that informs politics without dictating what form politics should take.

Just as I have branched out from history to an interdisciplinary approach to these questions, so it is instructive to engage in intellectual exchanges with three political theorists and a scholar of South Asian studies. I thank them all for their ideas and comments.

²⁸Karl Jaspers, *Man in the Modern Age*, trans. Eden Paul and Cedar Paul (New York: Holt, 1933; first published in German, 1931), 1, 4.