

## *JAS* Round Table on Amitav Ghosh, *The Great Derangement: Climate Change and the Unthinkable*

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INTRODUCTION: AMITAV GHOSH AMONG THE ASIANISTS

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AMITAV GHOSH, PERHAPS ASIA'S most prominent living author, moves among many genres and across vast territories. His fiction—*The Circle of Reason* (1986), *The Shadow Lines* (1988), *The Glass Place* (2000), *The Hungry Tide* (2004), and *The Ibis* trilogy—takes us from Calcutta where he was born in 1956 to the Arabian Sea, Paris, London, and back again to the Indian Ocean, the Bay of Bengal, and beyond. His nonfiction—*In an Antique Land* (1992), *Dancing in Cambodia and at Large in Burma* (1998), and *Countdown* (1999)—rests on a PhD in social anthropology from Oxford. He went to Alexandria, Egypt, for his dissertation research.<sup>1</sup> His science fiction, *The Calcutta Chromosome*, won the Arthur C. Clarke Award in 1997. His essays—published in *The New Yorker*, *The New Republic*, and *The New York Times* and collected in *The Iman and the Indian* (2002)—address major issues such as fundamentalism. Indeed, most of his work addresses big questions, exploring the nature of communal violence, the traces of love and longing across generations, manifold religious manifestations, and the systematic pain of colonial oppression. The deep and abiding theme of many works is anthropogenic environmental damage, now boldly and directly addressed in *The Great Derangement: Climate Change and the Unthinkable* (2016). Married to accomplished fellow author Deborah Baker, whose work traces the Asian peregrinations of Allen Ginsberg, the literary milieu of Laura Riding, and the complexity of Islamic conversion, Ghosh has taught at Harvard, Columbia, Queens College, and Delhi University. He has won more prizes and honorary doctorates, and been a fellow at more famous institutions and a distinguished visitor in more far-flung places, than you can shake a stick at. He even has two homes: Brooklyn and Goa. In short, Ghosh's profile makes you wonder if there might not be more than one of him.

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<sup>1</sup>For more on Ghosh's anthropological interests, see Damien Stankiewicz, "Anthropology and Fiction: An Interview with Amitav Ghosh," *Cultural Anthropology* 27, no. 3 (2012): 535–41.

Yet when Ghosh gave his 2012 keynote address to the Association for Asian Studies (AAS) conference in Toronto, he spoke of the modest tea tray.<sup>2</sup> This everyday object was an unremarked part of his childhood. Only in retrospect did it become the key to unlocking a different view of imperial history. Why, Ghosh asked, had India looked almost exclusively to Britain instead of to China? Why, even as Indians drank Chinese tea from cups and saucers called, after all, “china” did they think of England? Why did the historical ties to the East India Company with its counting houses in London loom so large while the vibrant nexus between South Asia and the Qing Empire go unexplored? With these questions, Ghosh was joining the quest of many AAS scholars to overturn the dominant story of imperialism told from the European perspective. That story had centered on Britain, portraying it as the great pulsing hub diffusing knowledge and violence, prosperity and destruction, shaping global history. But that story appears as unconvincing to Ghosh as to many of us. Beginning with a simple tea tray, he spun a tale of dense connections between South Asian and Chinese traders, of the vibrancy of Asian economies before the coming of the West, of the transformation of Indian landscapes by tea plantations, of the opium traded and the wars fought between Indian sepoys and Chinese soldiers, and of the cultural bridges built through love, translation, and the transmission of literary, religious, and botanical knowledge.

The intra-Asian focus of his AAS address is likewise central to the *Ibis* trilogy that Ghosh was completing at the time. These rambunctious novels (*Sea of Poppies*, *River of Smoke*, and *Flood of Fire*) are packed with characters ranging from Deeti, the determined widow of an opium addict escaping her fated immolation, to Neel Rattan Halder, a wealthy rajah who loses everything except his intelligence and compassion, from Ah Fatt, the son of a Chinese boat woman and a Parsi trader, to Benjamin Burnham, an unscrupulous British merchant plying the South China Sea. Through these dense connections tying India and China together, Ghosh’s novels joined his AAS lecture in resetting imperialism’s stage.

Most recently, Ghosh has turned to confront the most pressing issue of our time. *The Great Derangement: Climate Change and the Unthinkable* (University of Chicago Press, 2016) began as the Randy L. and Melvin R. Berlin Family Lectures, delivered at the University of Chicago in four installments, on September 29 and 30 and October 6 and 7, 2015. Here the themes of environmental destruction, world history, and Asia’s place, always woven into Ghosh’s fiction, are directly illuminated. As economic historian Prasantan Parthasarathi says in his response below, this book is dazzling. Since it emerged from Ghosh’s long and intense relationship with academic interlocutors, it is appropriate that we respond in the *Journal of Asian Studies*, extending to him the courteous interest that he has shown our work.<sup>3</sup> This round table engages *The Great Derangement* in the same spirit of informed conversation that Ghosh had embodied in Toronto. As though leaning across emptied wine glasses, we ask together the question most vital to our well-being and our intellectual credibility: how are we as scholars, teachers, artists, and citizens to understand the physical transformation of the planet? Parthasarathi, after summarizing

<sup>2</sup>Amitav Ghosh, “China and the Making of Modern India,” Association for Asian Studies Annual Conference, Toronto, 2012.

<sup>3</sup>See, among much else, Amitav Ghosh and Dipesh Chakrabarty, “A Correspondence on *Provincializing Europe*,” *Radical History Review* 83 (2002): 146–72.

the arc of *The Great Derangement* through the literature, history, and politics of climate change, focuses on the connection between economic inequality and environmental destruction. A global system that breeds destitution for many and the riches of Midas for a few strips our planet bare. In my essay, from the perspective of an intellectual historian of Japan, I examine the concept of “Asia,” embracing its importance to understanding our predicament but also wondering if “Asia” in encompassing so much might impede as well as aid our effort to make climate change “thinkable.” South Asian art historian Rob Linrothe describes his travels in the seemingly boundless Himalayas, asking how we might understand the sensation of their infinite magnificence in relation to what we know of melting glaciers. Historian of science Fa-ti Fan queries modernity, pointing out that “modernity narratives have failed to imagine Asia (without marginalizing it or turning it into the Other), and Asia has failed to imagine itself (without falling into the trap of Western modernity).” China historian Kenneth Pomeranz ponders the relationship between the empiricism of social scientists and the imagination required of novelists. We hope you will find these engagements provoking and a spur to reading *The Great Derangement* for yourself. As many have noted, the boundaries among disciplines are shifting to permit new forms of knowledge and new imaginaries as we confront a violently changing world. We will need to think *together* more than ever.

One final note. Ghosh uses the word “Anthropocene.” This term, proposed in 2000 by atmospheric chemist Paul Crutzen and the ecologist Eugene Stoermer, is now under serious consideration by the Working Group on the Anthropocene (WGA), part of the Subcommittee on Quaternary Stratigraphy, which is itself under purview of the International Commission on Stratigraphy. In essence, then, “Anthropocene” is a term originating in the sciences, specifically geology, to refer to the transformation of the Earth system from the relatively stable Holocene beginning 11,700 years ago to a wilder, warmer, wetter planet less hospitable to human beings. The proposal currently being considered by the WGA places the boundary between the Holocene epoch and the Anthropocene epoch (“epoch” being shorter than “era”) in the new strata of plastics, concrete, and nuclear irradiated substances laid down by human activities since 1950. The past seventy years, in the words of John R. McNeill and Peter Engelke, form “the most anomalous and unrepresentative period in the 200,000-year-long history of relations between our species and the biosphere.” During this strange time, “three-quarters of the human-caused loading of the atmosphere with carbon dioxide” took place; the number of motor vehicles rose from 40 million to 850 million; the number of human beings tripled to about 7.4 billion; 1 million tons of plastic became 300 million tons; 4 million tons of synthesized nitrogen (mainly for fertilizers) rose to more than 85 million; the levels of methane and phosphorus are unprecedented in the experience of our species. And on and on. These changes are not merely taxing ecosystems; they are transforming those processes irrevocably.<sup>4</sup>

I quote these facts at some length because it is important to be clear as to the specificity and magnitude of this new concept. Sometimes “Anthropocene” is mistakenly taken to refer to the fact that humans have altered the environment, but this is not

<sup>4</sup>John R. McNeill and Peter Engelke, *The Great Acceleration: An Environmental History of the Anthropocene since 1945* (Cambridge, Mass.: Harvard University Press, 2014), 4–5.

what the concept means.<sup>5</sup> All organisms, human and otherwise, change their surroundings and have always done so. No new term would be required to refer to those activities. “Anthropocene” means instead not simply altering particular environments, ecosystems, or landscapes, but an irreversible rupture of the Earth system itself, the overshoot of the planetary boundaries that had provided a “safe operating space for humanity.”<sup>6</sup> The sense in which Amitav Ghosh, following the geostratigraphers, uses the term demands not local adjustments to our structures of power, representation, and production but their radical rethinking, with Asia at the core. This is the crux of Ghosh’s book and the beginning point of our engagements with it.

## EMPIRE, INEQUALITY, AND CLIMATE CHANGE

### Prasanna Parthasarathi

*The Great Derangement* is a dazzling book. For readers of Amitav Ghosh, this should come as no surprise. He has been dazzling us for three decades. This time Ghosh guides the reader with a light but deft touch through the literature, history, and politics of climate change.

In the opening chapter, which comprises half the book, Ghosh declares, “Let us make no mistake: the climate crisis is also a crisis of culture, and thus of the imagination.”<sup>7</sup> The “banishment” of climate change from serious fiction is a sign of this crisis, and Ghosh argues that the modern novel’s focus on the probable and the prosaic makes it incapable of dealing with the exceptional and the catastrophic. Both of these, which certainly describe climate change, are the stuff of premodern forms of storytelling and poetry or the genre novel whose “outhouses” include fantasy and science fiction. The latter, however, are relegated to the margins of the contemporary literary world.

The next chapter turns to history and adds imperialism to the usual focus on capitalism as a critical contributor to our climate crisis. According to Ghosh, “capitalism and empire are dual aspects of a single reality,” but in relation to global warming they have “often pushed in different directions, sometimes producing counter-intuitive results.”<sup>8</sup>

<sup>5</sup>See, e.g., Kathleen D. Morrison, “Provincializing the Anthropocene,” [http://www.india-seminar.com/2015/673/673\\_kathleen\\_morrison.htm](http://www.india-seminar.com/2015/673/673_kathleen_morrison.htm) (accessed June 6, 2016).

<sup>6</sup>Clive Hamilton, “The Anthropocene as Rupture,” *Anthropocene Review* 3, no. 2 (2016): 93–106, doi:10.1177/2053019616634741; Johan Rockström et al., “Planetary Boundaries: Exploring the Safe Operating Space for Humanity,” *Ecology and Society* 14, no. 2 (2009). Rockström et al. have developed the idea of nine critical planetary boundaries or thresholds that should not be crossed related to (1) climate change, (2) ocean acidification, (3) stratospheric ozone depletion, (4) the biochemical flow in nitrogen and phosphorus cycles, (5) freshwater overusage, (6) changes in land use, (7) biodiversity loss, (8) atmospheric aerosol loading, and (9) chemical pollution. The term “Anthropocene” encompasses rapid environmental changes on all these levels. See also Johan Rockström et al., “A Safe Operating Space for Humanity,” *Nature* 461 (September 24, 2009): 472–75. This research was updated in Will Steffen et al., “Planetary Boundaries: Guiding Human Development on a Changing Planet,” *Science* 347, no. 6223 (February 13, 2015), doi:10.1126/science.1259855.

<sup>7</sup>Amitav Ghosh, *The Great Derangement: Climate Change and the Unthinkable* (Chicago: University of Chicago Press, 2016), 9.

<sup>8</sup>*Ibid.*, 87.

When empire is brought into the picture, the “continent of Asia is conceptually critical to every aspect of global warming: its causes, its philosophical and historical implications, and to the possibility of a global response to it.”<sup>9</sup> Imperialism “delayed the onset of the climate crisis by retarding the expansion of Asian and African economies.”<sup>10</sup> The crisis of global warming emerged in the late twentieth century when Asia began to grow more rapidly. And Asia will be hit hard by the consequences of a warming planet.

The final chapter of the book, entitled “Politics,” lays out in devastating fashion the reasons for the muted global response to our climate crisis. Ghosh argues that the framing of the problem as a moral one invites a politics of sincerity, but such individualization is a trap. While Ghosh points to some familiar barriers to action—the ideological commitment to the free market, especially in the Anglo-American world, and corporate-funded climate denialism—Ghosh’s Asian perspective leads him to point to something previous commentators have missed. Taking action on climate will mean a radical restructuring of global power, which is something that the dominant nations in the global system have resisted. “From this perspective,” he writes, “global inaction on climate change is by no means the result of confusion or denialism or a lack of planning; to the contrary the maintenance of the status quo *is* the plan.”<sup>11</sup> We are back to imperialism and its legacy of stark inequalities.

Eric Hobsbawm entitled the final volume of his great history of the nineteenth century *The Age of Empire* in recognition of the centrality of imperialism in the making of the modern world.<sup>12</sup> The decades that preceded World War I gave rise to major debates on the causes and consequences of European imperialism. By contrast our own times may be seen as an age of imperial denial. This is not due to the scholarly neglect of empire, which since the publication of Edward Said’s *Orientalism* in 1978 is thriving in literary studies and history,<sup>13</sup> although the US Empire does not receive the same attention as those of European powers and even the Japanese. In the popular imagination, however, imperialism is the object of benign neglect or even celebration. No popular critique of either the British or American empires has been as successful as Niall Ferguson’s imperial celebrations: *Empire: How Britain Made the Modern World* and *Colossus: The Rise and Fall of the American Empire*.<sup>14</sup>

In popular and even to some extent scholarly circles, it is difficult to persuade many that the present inequalities of the world are legacies of empire. The enthusiasm for David Landes’s *The Wealth and Poverty of Nations*, which attributes global inequality to culture—at the end of the day “culture makes all the difference” Landes concluded—is testimony to the imperial amnesia which besets our times.<sup>15</sup> Former Republican Party presidential nominee Mitt Romney cited *The Wealth and Poverty of Nations* in his own *No Apology: The Case for American Greatness*, where he wrote, “There are superior

<sup>9</sup>*Ibid.*

<sup>10</sup>*Ibid.*, 110.

<sup>11</sup>*Ibid.*, 145; emphasis in original.

<sup>12</sup>See Eric Hobsbawm, *The Age of Empire, 1875–1914* (New York: Pantheon, 1987).

<sup>13</sup>See Edward Said, *Orientalism* (New York: Vintage, 1978).

<sup>14</sup>See Niall Ferguson, *Empire: How Britain Made the Modern World* (London: Allen Lane, 2003); *Colossus: The Rise and Fall of the American Empire* (New York: Penguin, 2005).

<sup>15</sup>David S. Landes, *The Wealth and Poverty of Nations: Why Some Are So Rich and Others So Poor* (New York: W. W. Norton, 1998), 516.

cultures, and ours is one of them.”<sup>16</sup> The resistance among some economic historians to arguments that until the late eighteenth century the commercially developed regions of Asia were surprisingly similar to their counterparts in Europe is part of the imperial amnesia, for if there was a sizable gap that predated the age of empire, European dominance and exploitation cannot be blamed for the unequal distribution of resources in our times.

In this context, Ghosh’s insistence that imperialism is critical for understanding the “Great Derangement” is very welcome. A growing body of scholarship has found that inequality is a barrier to action on environmental problems, including climate change. In a landmark study, Mariano Torres and James K. Boyce found that in the Global South air and water pollution is correlated with economic inequality: countries that are more equal had cleaner environments. They hypothesize that when those at the bottom, who bear the brunt of the costs of ecological degradation, are economically empowered they are politically empowered and can influence state policies for the better.<sup>17</sup>

The link between higher inequality and increased environmental harm has also been identified with respect to emissions of heat-trapping gases. The sociologist Andrew Jorgenson found that countries that were more unequal had more carbon-intensive forms of production and consumption. He concludes that “reducing inequality may have the potential to both increase human well-being and enhance climate change mitigation efforts.”<sup>18</sup> In a study of the United States, Jorgenson and his co-authors identified a similar relationship. States that are more unequal are higher emitters of carbon dioxide.<sup>19</sup>

These findings suggest that global inequality has worsened global warming, although we cannot confirm this, given that we have only one world and therefore nothing to compare it to. They also lend support to Ghosh’s conclusion that “the distribution of power in the world ... lies at the core of the climate crisis.”<sup>20</sup>

Up till now we have been discussing inequality between nations and within nations. However, what would the picture look like if we ignored national boundaries and treated the world as a single community? A number of scholars have tried to do this, among the latest being Lucas Chancel and Thomas Piketty, who found that the 10 percent of the world’s population, or only 700 million people, account for 45 percent of global carbon emissions. The bulk of these high emitters live in the countries of the Global North, with 40 percent in North America, but 22 percent are in Asia, a larger proportion than from the European Union. Meanwhile, the bottom half of the world’s population is responsible for only 13 percent of total emissions. What these figures show is that our

<sup>16</sup>Mitt Romney, *No Apology: The Case for American Greatness* (New York: St. Martin’s Press), 264; emphasis in original.

<sup>17</sup>Mariano Torres and James K. Boyce, “Income, Inequality, and Pollution: A Reassessment of the Environmental Kuznets Curve,” *Ecological Economics* 25, no. 2 (1998): 147–60.

<sup>18</sup>Andrew K. Jorgenson, “Inequality and the Carbon Intensity of Human Well-Being,” *Journal of Environmental Studies and Sciences* 5, no. 3 (2015): 277–82.

<sup>19</sup>Andrew K. Jorgenson, Juliet B. Schor, Xiaorui Huang, and Jared Fitzgerald, “Income Inequality and Residential Carbon Emissions in the United States: A Preliminary Analysis,” *Human Ecology Review* 22, no. 1 (2015): 93–105.

<sup>20</sup>Ghosh, *Great Derangement*, *op. cit.* note 7, 146.

climate crisis is largely due to the actions and lifestyles of a tiny minority of which two-thirds live in the rich countries of the Global North but one-third does not.<sup>21</sup>

This vast global inequality is, in the final analysis, backed up by military power, which is heavily dependent upon fossil fuel technologies. A fascinating body of sociological research, again conducted by Andrew Jorgensen with collaborators, has found a powerful link between levels of military spending, measured as a proportion of gross domestic product or military personnel as a fraction of the labor force, and carbon emissions.<sup>22</sup> We have a double whammy: inequality is a major contributor to our climate crisis, as is the apparatus of violence that enforces our vast global inequalities. Ghosh is right on target in invoking empire as critical to our dilemma of planetary heating.

What is to be done? Ghosh is scrupulous in admitting that things do not look good for us. Yet he finds reason for hope. Inspired by Pope Francis's *Laudato Si'*, as well as statements issued by other faith leaders, he writes, "If religious groupings around the world can join hands with popular movements, they may well be able to provide the momentum that is needed for the world to move forward on drastically reducing emissions without sacrificing considerations of equity."<sup>23</sup> We must all join the fight, even us scholars and academics. If we want change, we have to demand it.

#### ASIA IN THE ANTHROPOCENE: THE PROBLEM OF REPRESENTATION

##### Julia Adeney Thomas

In *Flood of Fire*, the final novel of Amitav Ghosh's *Ibis* trilogy, the *Anahita* lies moored at the mouth of the Pearl River as the Opium War rages. A portly visitor being winched aboard hangs momentarily suspended above the deck. Suddenly, the sun breaks through the battle smoke, turning the swaying, terrified figure into a supernatural apparition. The voluptuous body, flowing tresses, and voluminous robes merge male and female, human and divine, while below the lascars and soldiers of the East India Company gape electrified. Lowered slowly to the deck, this enigmatic personage announces itself as Babu Nobo Krishna Panda. He comes to declare "Kaliyuga, the epoch of apocalypse." Gesturing to the *Nemesis*, Britain's iron warship, he explains to the sepoy Kesri Singh:

It is the destiny of the English to bring about the world's end.... *Dekho*—look: inside that vessel burns the fire that will awaken the demons of greed that are hidden in all human beings. That is why the English have come to China and to Hindustan: these lands are so populous that if their greed is aroused they can consume the whole world. Today that great devouring has begun. It will

<sup>21</sup>Lucas Chancel and Thomas Piketty, "Carbon and Inequality: From Kyoto to Paris," Paris School of Economics, November 3, 2015, 6.

<sup>22</sup>Andrew K. Jorgenson, Brett Clark, and Jeffrey Kentor, "Militarization and the Environment: A Panel Study of Carbon Dioxide Emissions and the Ecological Footprints of Nations, 1970–2000," *Global Environmental Politics* 10, no. 1 (2010): 7–29; Andrew K. Jorgenson, Brett Clark, and Jennifer E. Givens, "The Environmental Impacts of Militarization in Comparative Perspective: An Overlooked Relationship," *Nature and Culture* 7, no. 3 (2012): 314–37.

<sup>23</sup>Ghosh, *Great Derangement*, *op. cit.* note 7, 161.

end only when all of humanity, joined together in a great frenzy of greed, has eaten up the earth, the air, the sky.

To make sure Singh understands, he describes Asia's role: "We are here to help the English fulfill their destiny. We may be little people but we are fortunate in that we know why we are here and they do not. We must do everything to help them. It is our duty, don't you see?"<sup>24</sup> Here Ghosh previsions in fiction not just the end of the world, but an issue central to *The Great Derangement*: Asia's role in the Anthropocene.

There are at least four ways to read the figuration of Asia in this passage. The first, most earnest reading would accord with recent scholarship pinning blame for climate change on English capitalists.<sup>25</sup> It would highlight the overwhelming power of British gunboat diplomacy forcing opium on the Chinese to pay for their tea-swilling habits. By this reading, the guilt for climate change, oxygen-depleted air, acidic oceans, and vanishing species—in short "the world's end," as Babu Nob Kissin calls it—is on the heads of Manchester industrialists and imperialist traders like Jardine Matheson. Historical reality has given Ghosh's fiction a gift: no serious novelist would otherwise name that fume-belching ship *Nemesis* nor invent its coal-fueled Forrester steam engines pivoting their fiery guns against Chinese junks in 1841.<sup>26</sup> The historical ship's name almost too perfectly gestures to the inescapable retribution that falls upon overweening mortals. Moreover, the name of the Greek goddess Nemesis is linked to the proto-Indo-European word for "distribute": in the global distribution of commodities lies the world's destruction.

A second reading of this passage might focus on the knowingness of colonial subjects. Babu Nob Kissin assures Kesri Singh that Asians, perhaps particularly South Asians, serve as witting aids to the unwitting British in destroying the world. As in Hegel's master-slave paradigm, the colonized know what the British cannot know; they see what the British (and the Americans) cannot see. Singh comes slowly to dismayed recognition of his role as a tool of British imperialism when he witnesses the fierce resistance of Chinese soldiers. On the other hand, Babu Nob Kissin delights in helping the mixed-race American sailor, Zachary Reid, crystallize into a blackmailing adventurer motivated solely by profit. It is ultimately Reid's ilk, divorced from any culture, caste, or customary niceties,

<sup>24</sup>Amitav Ghosh, *Flood of Fire* (New York: Farrar, Straus and Giroux, 2015), 509–10. See also "AHR Forum: Amitav Ghosh's *Ibis Trilogy* and Indian Ocean Studies," *American Historical Review*, forthcoming February 2017.

<sup>25</sup>See especially McKenzie Wark, *Molecular Red: Theory for the Anthropocene* (New York: Verso, 2015); Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (New York: Verso, 2015); Andreas Malm and Alf Hornborg, "The Geology of Mankind? A Critique of the Anthropocene Narrative," *Anthropocene Review* 1, no. 1 (2014): 62–69; Andreas Malm, *Fossil Capital: The Rise of Steam Power and the Roots of Global Warming* (New York: Verso, 2016); and Christophe Bonneuil and Jean-Baptiste Fressoz, *The Shock of the Anthropocene: The Earth, History, and Us* (New York: Verso, 2016).

<sup>26</sup>Ghosh takes up the problem of inserting "the improbable" into realist fiction through an anecdote of his own experience, a 1978 tornado in Delhi, that has never figured in his novels because "probability and the modern novel are in fact twins." Ghosh, *The Great Derangement*, *op. cit.* note 7, 16. Science fiction, on the other hand, in being overtly fantastic does not, Ghosh argues, have the stature to help us confront reality. Ursula K. Heise takes a diametrically opposite view of the value of science fiction in *Imagining Extinction: The Cultural Meanings of Endangered Species* (Chicago: University of Chicago Press, 2016).

who will stoke the world's neoliberal greed and reduce it to ashes. Unlike his enabler, Reid is too crass in his self-interest to reflect upon his cosmic role. By this reading, Asian knowingness brings shame to some and apocalyptic ecstasy to others.

A third reading, just as plausible, would rest on a convergence of East and West, since “the demons of greed” are hidden within “all human beings.” From this perspective, the swelling populations of India and China join with those of the West as “instruments of the will of the gods.” A leading proponent of the Anthropocene concept, chemist Paul J. Crutzen points to “the rapid expansion of mankind in numbers and per capita exploitation of Earth's resources” as a major contributor.<sup>27</sup> Both regions, in this account, are responsible for the world's destruction.

Fourthly, Babu Nob Kissin could be seen as a purveyor of “climate porn,” relishing the destiny of world-destroying fire, embracing catastrophe, for a better world beyond. “The sooner the end comes the better,” he tells Singh. “You and I are fortunate in having been chosen to serve this destiny: the beings of the future will be grateful to us. For only when this world ends will a better one be born.”<sup>28</sup> Here are echoes of the embrace of reason's end found in Horkheimer and Adorno's *Dialectic of Enlightenment*.<sup>29</sup> We might also see a celebration of the “Good Anthropocene” with its relish for geoengineering the planet. In response to environmental catastrophe, human beings, ecomodernists claim, can consciously steer spaceship Earth to utopia.<sup>30</sup>

*Flood of Fire* bears all these readings and no doubt more. Victim, enabler, perpetrator, and mystic visionary—Asia plays many contradictory roles at once in the destruction of the planet's resources.

The question of Asia's many roles hovers dramatically over *The Great Derangement* as Ghosh turns to nonfictional considerations of climate change. “The continent of Asia,” as he argues, “is conceptually critical to every aspect of global warming: its causes, its philosophical and historical implications, and the possibility of a global response to it” and yet “the discourse around the Anthropocene, and climate matters generally, remains largely Eurocentric,” especially with the problematic concepts of “modernity,” “capitalism,” and “nation.”<sup>31</sup> “Modernity” remains for many the West's private reserve despite incisive efforts at provincializing Europe, despite Japan's competing modernity, despite research aimed at grasping Earth systems as planetary.<sup>32</sup> “Capitalism” remains *the* decisive

<sup>27</sup>Paul J. Crutzen, “Geology of Mankind,” *Nature* 415 (January 3, 2002): 23.

<sup>28</sup>Ghosh, *Flood of Fire*, *op. cit.* note 24, 510.

<sup>29</sup>Max Horkheimer and Theodor W. Adorno, *Dialectic of Enlightenment: Philosophical Fragments* (Stanford, Calif.: Stanford University Press, 2002).

<sup>30</sup>For ecomodernism, see Ted Nordhaus and Michael Shellenberger, *Break Through: From the Death of Environmentalism to the Politics of Possibility* (Boston: Houghton Mifflin, 2007). For a critique of this “Promethean recklessness,” see Clive Hamilton, *Earthmasters: The Dawn of the Age of Climate Engineering* (New Haven, Conn.: Yale University Press, 2014).

<sup>31</sup>Amitav Ghosh, *Great Derangement*, *op. cit.* note 7, 87.

<sup>32</sup>As Ghosh puts it, Western modernity's one truly distinctive feature is “its enormous intellectual commitment to the promotion of its supposed singularity.” *Ibid.*, 103. For critiques of Eurocentrism, see Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference* (Princeton, N.J.: Princeton University Press, 2000). For Japan's competing modernity, see Sharon A. Minichiello, *Japan's Competing Modernities: Issues in Culture and Democracy, 1900–1930* (Honolulu: University of Hawai'i Press, 1998); Gareth Austin and Kaoru Sugihara, *Labour-Intensive Industrialization in Global History* (New York: Routledge, 2013); and Julia

framework for analysis despite the evidence of non-capitalist Asian developmentalism.<sup>33</sup> “Nations” remain the foundation of climate treaties, including the recent Paris Accord of 2015, despite the fact that the wealth or poverty of individuals rather than their citizenship is a more accurate indicator of environmentally destructive consumption.<sup>34</sup> Without jettisoning any of these three concepts entirely, Ghosh reveals how inadequate each is to the magnitude and complexity of the Anthropocene and how thinking with Asia can help us overcome their limitations. Centering Asia allows us to see that modernity’s patterns of life can only be practiced by a small minority of the world’s people. Asian history shows that “capitalism” needs to be thought with “imperialism” to recognize the agency of Asians, their long history of noncapitalist exploitation of resources, and how colonialism may even have delayed carbon emissions by delaying Asian industrialization. It is also true that “no strategy can work globally unless it works in Asia and is adopted by large numbers of Asians.”<sup>35</sup> In short, Asia is victim, perpetrator, and redeeming agent all at once.<sup>36</sup>

Ghosh does not press the point, but his analysis also raises the question of whether the category of “Asia” itself might obscure Anthropocenic complexity. With Bhutan at one extreme absorbing more carbon dioxide than it produces while suffering from swiftly melting glaciers and Japan at the other, a highly developed, consumer society of long standing draining the world’s resources in parallel with other developed countries, “Asia” refuses to resolve into one coherent figure. If we incorporate all the roles prefigured in *Flood of Fire*, “Asia” may be yet another element of climate change’s “unthinkability:” too many ecosystems, elevations, class hierarchies, gender roles, and modes of production and consumption. Too much of everything. And yet, Ghosh suggests, it is a better rubric than those that dominate our current thinking.

The brilliance of *The Great Derangement* lies in its persuasive revelation of how our modes of representation have derailed humanity, blinding us to our real condition. We can act only when we create an appropriate distance between our abstract tools of understanding and the exuberant messiness of reality. Today, Ghosh tells us, representation and reality are too far apart. He speaks of the “irony of the ‘realist’ novel” in that “the very

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Adeney Thomas, ed., “Japan’s Convergence with the West: How Similar Approaches to Nature Created Parallel Developments,” special issue, *Japanese Studies* 34, no. 3 (2014). For explorations of other modernities and their uses of natural resources, see Gareth Austin, ed., *Economic Development and Environmental History in the Anthropocene: Perspectives on Asia and Africa* (London: Bloomsbury, 2016). For planetary systems, see Johan Rockström et al., “Planetary Boundaries: Exploring the Safe Operating Space for Humanity,” *op. cit.* note 6, and Will Steffen et al., “Planetary Boundaries: Guiding Human Development on a Changing Planet,” *op. cit.* note 6.

<sup>33</sup>See, e.g., Kenneth Pomeranz, *The Great Divergence: China, Europe, and the Making of the Modern World Economy* (Princeton, N.J.: Princeton University Press, 2001), and Robert Marks, “Commercialization without Capitalism: Processes of Environmental Change in South China, 1550–1850,” *Environmental History* 1, no. 1 (1996): 56–82.

<sup>34</sup>Lucas Chancel and Thomas Piketty, “Carbon and Inequality,” *op. cit.* note 21.

<sup>35</sup>Ghosh, *Great Derangement*, *op. cit.* note 7, 90.

<sup>36</sup>Ghosh argues that Asia is a perpetrator of the Anthropocene in “the rapid and expanding industrialization of Asia’s most populous nations” and home to “the great majority of potential victims.” *Ibid.*, 91, 88.

gestures with which it conjures up reality are actually a concealment of the real.<sup>37</sup> The same is true of the historical profession's commitment to progressive narratives and probabilistic causes, of economics where the concepts of "growth," "discounting," and "interest" rely on unlimited abundance, and of politics where the words, for instance, of the Paris Climate Accord (COP21) admit to no catastrophe, but imply instead that "negotiations had been convened to deal with a minor annoyance."<sup>38</sup>

On the other hand, we must beware the mystical union of representation and reality where humanity and nature meld. In this sense, Babu Nob Kissin in his guise as ecstatic mystic is the most dangerous figuration of all. Babu Nob Kissin's sublime submission to the great derangement is certainly not what Ghosh wants for us. He underscores the problems with our current categories not in order to discourage thought, not to urge us to fold the tent of reason and forego form, let alone push relentlessly along the failed path of ecomodernist hyper-reason. Instead, Ghosh reveals how thoroughly our dominant modes of representation were fitted for another age and another ecology. Now that their promise has foundered on the shoals of climate change, we must bend our critical faculties and our imaginations to crafting radically new modes of representing our unprecedented condition and its sudden tipping points. COP21 failed in not being adequately radical, clinging unquestioningly to the Eurocentricism, modernity, capitalism, and national forms complicit in our catastrophe. Amitav Ghosh, our modern Demosthenes, holds some painfully sharp pebbles in his mouth and yet speaks clearly.

#### MY FAILURE OF IMAGINATION: THE SENSES AND DERANGEMENT

##### Rob Linrothe

The senses are subtly in evidence in *The Great Derangement*. Sensations become images that become interpretations, yet interpretation does not "necessarily demand a sense of hearing or sight."<sup>39</sup> Indeed, the most intense perceptions resist translation into representation (and vice versa), as Ghosh acknowledges when he describes his terrifying, real-life experience of a tornado ripping through Delhi in 1978, an experience that he has never mined for his fiction. Such indelible, multi-sensory experiences feel like improbable "contrivances" in novels and other retellings. They oppose narrative, and yet are constantly called to mind—to the senses—unbidden, like a tiny stone in a shoe. Perhaps these intense experiences themselves freeze up the triangulated dynamic among sensation, interpretation, and representation, and therefore help produce the crisis of imagination in the era of climate change. Their charge in my case has been enough to overpower my recognition of our collective imperilment, and stymie my ability to react ethically and to represent to others the grave dangers I know our planetary home faces. In what follows, I explore the tension between sensation and interpretation, tracing the routes of this negation in my own experiences in remote regions of the Himalayas.

The hereditary Lonpo, or minister, at Karsha village is in his seventies, his intelligent face lined by the years. Now a monk, tonsured by His Holiness the Dalai Lama himself,

<sup>37</sup>*Ibid.*, 23.

<sup>38</sup>*Ibid.*, 154.

<sup>39</sup>*Ibid.*, 82.

for decades he lived as a husband and father of seven children, a farmer and herder, a Tibetan language teacher, and a leader in his village known for his learning in both Tibetan medicine and astrology. Villagers still seek him out when they fall ill, and monks consult him before scheduling rituals on auspicious days. He has long been locally highly regarded as the repository of the history of Karsha and the surrounding area called Zangskar, a pocket of Ladakh in the western branch of the Great Himalayan Range. Recently he published—in Tibetan script and language—a history of Tibetan-style Buddhism in Zangskar, which though culturally affiliated with Tibet, is politically within India, and so was undisturbed by the Chinese occupation. The Lonpo's memory remains sharp, even as he increasingly turns away from this world into his preparations for death and rebirth. Lately he has been occupied by daily offering rituals, making or repairing Buddhist monuments, and reciting Buddhist texts.

I have known him since the early 1990s, soon after my first trek into the region in 1990. I learned from him that the most prominent mountains visible from Karsha village (see figures 1 and 2) have traditionally been used as fixed points for calendrical calculations. Over centuries, the climate was stable enough that the day to begin to sow or harvest could dependably be determined by observing when the sun reached a particular peak. An important directional spirit-protector is also associated with the one of the mountains, so they are not only visually prominent but revered. He has told me several times that the thick glaciers still clinging to the mountain peaks are not nearly the size they were when he was a young man. In Zangskar, where production and consumption had little to do with the underlying causes of climate change and global warming, several villages have already had to deal with decreasing glaciers. Consequently, irrigation and drinking water dries up, and hamlets and fields have to be



**Figure 1.** View from Karsha of mountains above Padum, Zangskar. Photo by Rob Linrothe (1990).



**Figure 2.** View from Karsha of mountains above Padum, Zangskar. Photo by Rob Linrothe (2015).

abandoned. Men like my regular trekking guide, a farmer and herder of nearby Pishu village, have to seek supplementary employment (such as trekking with foreigners like myself for thirty days at a time) since the snow-melted irrigation water runs out at Pishu by August. Villagers must now harvest early to salvage what they can. The Lonpo's son-in-law, a civil engineer working for the local government, has told me that his agency is planning how to respond as bad conditions become more widespread in the Zangskar valley. They foresee the eventual evacuation and abandonment of the area with devastating consequences for Zangskari livelihood and culture.

I know drought is coming. I have read about it, I have heard about it, I have indirectly felt the effects from people encountered, people I have known, trusted, even depended on for a decade or, in the case of the Lonpo, for more than two. Last summer I traced the source of water for Pishu village up into the hills behind the village. The stream, just a few minutes' hike up the canyon from the last house, had once been so powerful that it had strewn massive boulders as though they were children's marbles in its rush downward towards Pishu, but now I saw only a trickle. I stepped over it without wetting my Tevas. I can indeed acknowledge climate change intellectually. Yet the concept does not seem as concrete as the sheer ice wall from which the stream emerges. I cannot perceive diminishment, only substance. In the face of the mountain environment and glaciers that I have walked around or over, I am unable to fully comprehend the gravity of the peril. Compared to the traction of my senses on the tangible numbing cold of ice and on the sharp hardness of rock or the feeling of my breath rasping and my temples thumping at eighteen thousand feet, "climate change" is wispily abstract.

Despite the mounting evidence of climate catastrophe, I find myself believing that some essential quality of these magnificent peaks will escape destruction because the



**Figure 3.** Kang Yaze in Ladakh. Photo by Rob Linrothe (2002).

conditioning of my sensory experiences leads me to that almost unutterable conclusion. Each year, when I return to Zangskar, which I have visited around twenty times now, I look at those particular mountains from Karsha. I compare them mentally with what I saw on earlier treks and look at the photographs taken over the years from my first visit in 1990 (see [figure 1](#)) to my most recent visit in the summer of 2016 (see [figure 2](#)). In person or in photographs, I do not *see* the difference that twenty-five of the deadliest years of the Anthropocene have made. My embodied experience of these and the surrounding mountains is too powerful for me to dismiss, for I know them



**Figure 4.** The Indian Himalayas from ca. 36,000 feet. Photo by Rob Linrothe (2015).

with my feet and skin as well as my eyes. A single mountain dominates the land and sky for days (see [figure 3](#)) as I walk towards it, set up camp on its shoulder, cross its pass early in the morning while the snow still crunches hard underfoot, and feel its shadow on my back for a few days more while walking towards the next peak. I feel their eternity, not their fragility.

Then, when I look down on the western Great Himalayan Range from the air while flying out of the region, these mountains turn into a spectacle on a scale that completely dwarfs my imagination (see [figure 4](#)). From the air, the mountain that ruled my days and guided my steps for a week or more, whose profile from all angles became indelibly imprinted in my mind (see [figure 3](#)), becomes an indistinct bump, a white-cap in an ocean of mountains that extends beyond putative national borders as far as the eye can see at 35,000 feet, *in all directions*, far beyond any conceivably useful road. The supremacy up close and the immensity at a distance inevitably if predictably serves as a reminder of one's insignificance. In that realization *their* vulnerability is impossible to conceptualize. So vast a reservoir of mountain chains abutting mountain chains inhabited still by thinning herds of wild ibex and blue-sheep in stupendous isolation among steep cliffs cannot but endure, one feels, unscathed by conflagrations and flooding at lower altitudes. Glaciers will shrink, but there are thousands of them up here, and there will still be winters in those mountains; they provoke them. Even if humans do not thrive here, honestly, when have we ever done more than pass through (now above) the sea of peaks? To and from where? No forests will burn there, so far above the tree line, no cities worthy of the name will be abandoned and forgotten.

Repeated experience of the Himalayas' vast scale, whether within the orbit of a single mountain or above an endless sea of them, inscribes in me an irrational, visceral confidence about their imperviousness. Illusory as it may be, so far it is impossible for me to abandon this sensory confidence. Climate change and global warming are having their effects even in those vast remoter-than-remote fastnesses, but my bones and tissues whisper: stones will melt before these mountains surrender their commanding summons over the winds and snows. No doubt I have too much imagination in grasping at the sheer materiality of the mountains, and not enough in giving weight to the invisible agents tearing away even such unfathomable webs of structures. No wonder artists have resisted the challenge, as Amitav Ghosh's brilliant discourse describes, to represent this change until it is too late. Climate change does not render itself to my human senses with the force and pulse of a transcendent beingness, or thingness, immensely beyond human scale. I do not see it, feel it, taste or touch it. I am blinded by my vision.

## IMAGINING OURSELVES OUT OF MODERNITY AND CLIMATE CRISIS

### Fa-ti Fan

If, as the scientific consensus shows, anthropogenic climate change is an unfolding global catastrophe, why is it so hard to get people to take it seriously and do something about it? A civilization running on fossil fuels is hurtling down a treacherous path, but it does not seem to be able to steer itself away from the dangers ahead. To the future generations, it will seem as though we are suffering a great derangement. It is this puzzle that Amitav Ghosh's powerful book—a treat of anguished and searching prose—tries to solve. Why is it so hard to imagine global climate crisis? Ghosh's answer is that our imagination is trapped in modernity, a problem he calls a “crisis of culture.”<sup>40</sup> Ghosh focuses on three aspects of this crisis, as reflected in literature, history, and politics respectively. I describe the core issue in each case as imagining the real, imagining Asia, and imagining the political. For reasons that will be clear later, I will discuss the issue of imagining Asia last.

#### *Imagining the Real*

Ghosh, a great novelist himself, observes that literary novels have said little about global climate change. Speculative fiction, yes, but not the serious realist novel. Indeed, Ghosh uses the modern novel as an epitome of the crisis of imagination. If literary novels have rarely dealt with the topic of global climate change, it is not because novelists are ignorant. Rather, it has to do with the novel, as a form of narrative representation, itself. The premises, claims, and rhetoric of the modern novel, the techniques of mimetic realism on which its literary effects depend, have actually contributed to its deafening silence on a global crisis in the making. As has been suggested, the modern novel emerged along with particular eighteenth-century bourgeois assumptions about ontology, epistemology, social reality, and morality. The main characters, as self-conscious subjects of mainstream morality, live through individual experiences in the predictable regularities of nature, space, and time. Thus, the modern novel imagines “the

<sup>40</sup>Ghosh, *Great Derangement*, *op. cit.* note 7, 8.

real”—a make-believe microcosm in this world—based on the epistemic regime of the modern era.<sup>41</sup>

Therein lies the rub. This repertoire of realism is ill-equipped to imagine “the real” in the Anthropocene. When nature is not inert, when the human/non-human divide is breaking down, when events and actors are no longer confined to slices of place and time, and when the seemingly enclosed and orderly world is interrupted by external, uncanny powers, the modern realist novel is at a loss, unable to represent such a world.

### *Imagining the Political*

Similarly, according to Ghosh, the political imagination of modernity is ill-suited for confronting the challenges of the Anthropocene. The dominant political theories, organizations, and actions are products of modernity, such as Enlightenment principles (e.g., rights, liberty, and rational democracy), nation-states, and interstate organizations. Consequently, we have managed to produce only feeble political responses to global climate change—individual moral choices (e.g., picking the right kinds of light bulbs), organized demonstrations that amounted to spectacles rather than revolutions, and inter-governmental agreements compromised by calculations of national interests. Where can we find the moral and political imagination that transcends the inadequacies of modern politics in the Anthropocene? Ghosh offers no proposals and mostly sounds pessimistic. When he tries to be hopeful, it seems a little forced. At the end of *The Great Derangement*, Ghosh, a nonbeliever, contemplates the power of organized religions, unconstrained by modern platitudes, to inspire and instruct their followers into action.

I generally agree with Ghosh’s perceptive argument. However, I also feel that by consolidating the various features into one “crisis of culture,” we might be lumping different things into a totality (something like “the modernity project”). For even science, often seen as the quintessential example of modernity, is highly heterogeneous. Few historians of science still harbor the notion that there has been a coherent metaphysical, epistemic, or methodological foundation for science. What has been called “modern science” is but an umbrella category that includes a broad diversity of activities, methodologies, actors, and cultures.<sup>42</sup> In the eighteenth and nineteenth centuries, for example, the enterprise of field natural history, which included collecting specimens, vernacular knowledge, eyewitness accounts, sensory experience, textual tradition, and so on, required very different cultural resources from those adopted in, say, theoretical physics. It is not helpful to insist that all these activities shared a unified epistemology.

In literature, too, exceptions threaten to devour the rule. The resonances that a novel or a novelist generates among readers far and wide can be surprising. William Faulkner, an intensely regional writer, may also be the most influential twentieth-century American writer in the Global South, inspiring major literary figures from Latin America to India and China. His works demonstrate that realist novels (grounded in a sense of place and time) can also be epics and mythologies.

<sup>41</sup>Ian Watt, *The Rise of the Novel: Studies in Defoe, Richardson, and Fielding* (Berkeley: University of California Press, 1957).

<sup>42</sup>Fa-ti Fan, “The Global Turn in the History of Science,” *East Asian Science, Technology, and Society* 6, no. 2 (2012): 249–58; “Modernity, Region, and Technoscience: One Small Cheer for Asia as Method,” *Cultural Sociology* 10, no. 3 (2016): 352–68.

Let us turn to the issue of the political imagination. What underlines much of the lack of urgency in the Anglosphere (Ghosh's category), especially the United States, is what may be called the difficulty of imagining other people and the moral implications of distance.<sup>43</sup> This problem is not conditioned by Enlightenment political thought. It is just that climate crisis appears to be someone else's problem, in faraway lands and in the future.

And here lies the heart of Ghosh's overall argument—imagining Asia.

### *Imagining Asia*

The Bengal Delta, a transnational region with a dense and fast-growing population of 200 million, is a place stalked by natural calamities. Cyclones, floods, and food shortages are not remote memories, but frequent realities. With its low-lying geography, it is also extremely vulnerable to global climate change. If the sea level rises one meter (which will probably happen by 2100), close to one-fifth of Bangladesh will be submerged and more than 20 million people displaced. This number does not include the parts of India that will also be affected. China, just like South Asia, is highly exposed to climate crisis. Erratic weather, droughts, and water shortages are on the horizon. Southeast Asia, with its expanding population and urbanization, is no less susceptible. As these are all densely populated countries, what is going to happen? Asia is at the center of global climate crisis.

Here history is everything.<sup>44</sup> By restoring Asia to the center stage, Ghosh shows how Western imperialism—related, but not limited, to capitalism—played a double function in global warming. By insisting on the uniqueness of its modern achievements, by dismissing the participation and contribution of others in the enterprise, and by suppressing the competition of other modernizing efforts, Western imperialism—which sought military, cultural, and political domination over others—both impeded and encouraged modernization projects in Asia. With their desire to be modern, to catch up with the self-congratulatory Western modernity, Asian countries plunged themselves into a frenzy of modernization. The predicament of this late modernization is that major Asian countries, notably China and India, are quickly becoming primary contributors to, and first victims of, global climate change. Modernity narratives have failed to imagine Asia (without marginalizing it or turning it into the Other), and Asia has failed to imagine itself (without falling into the trap of Western modernity).

I share Ghosh's pessimism, but I think it just may be that this predicament—History's cruel prank on Asia—is also where the hope might come from. As climate crisis deepens in Asia, a sense of urgency grows. The demand to do something will be ever louder. The pressure to act will be mounting. Soon Asia, as well as the rest of the world, will no longer be able to avoid confronting the staggering costs of fossil-fueled modernity. The list of

<sup>43</sup>Elaine Scarry, "The Difficulty of Imagining Other People," in *For Love of Country: Debating the Limits of Patriotism*, eds. Martha Nussbaum and Joshua Cohen, 98–110 (Boston: Beacon Press, 2002); Carlo Ginzburg, "Killing a Chinese Mandarin: The Moral Implications of Distance," *Critical Inquiry* 21, no. 1 (1994): 46–60.

<sup>44</sup>On historicity and historical writing in the Anthropocene, see Dipesh Chakrabarty, "The Climate of History: Four Theses," *Critical Inquiry* 35, no. 2 (2009): 197–222; Julia Adeney Thomas, "History and Biology in the Anthropocene: Problems of Scale, Problems of Value," *American Historical Review* 119, no. 5 (2014): 1587–1607.

disaster cases gets longer—the Maldives, Bangladesh, the Philippines.... To blunt the impact, major Asian countries, including India and China, will become willing, even eager, campaigners for immediate global actions. Collectively, the voice and weight of Asia can be decisive in tipping the will of the world. It might be already too little, too late for global solutions to work (such as the blanket reduction of anthropogenic greenhouse gas emissions), but it might still be possible to find broad political solutions for those who are most affected by climate crises (such as migrants and displaced populations).

Am I imagining the real? Or is it just a fantasy?

## EMPIRICISM AND IMAGINATION

### Kenneth Pomeranz

Truth is stranger than fiction, but it is because fiction is obliged to stick to possibilities; Truth isn't.

—Mark Twain

Amitav Ghosh's *The Great Derangement* argues forcefully that Twain's quip is very much of our times: that our bourgeois worldviews have compelled "respectable" fiction to "stick to the possibilities," while probabilistic and human-centered sciences have excluded from those possibilities nonlinear, catastrophic change in our "natural" environment.<sup>45</sup> This outlook—originally mostly European, but now prevalent almost everywhere—equips us poorly for the environmental crises unleashed by the pursuit of endless economic growth, which those same worldviews encourage. Since roughly 1980, consumer capitalism has soared in densely populated Asia, while scientists have become increasingly certain that elevated carbon emissions will have terrifying results. Our inadequate responses to that knowledge make Ghosh's attempt to expand our aesthetic, political, and philosophical imaginations urgent.

Asia's booming growth and emissions began roughly simultaneously with a deliberate, worldwide weakening of structures designed to make humans less vulnerable to catastrophe: regulations curbing reckless short-term profit-seeking and "safety nets" designed to aid the immediate victims of various misfortunes. Believing in a relatively predictable world can fit perfectly well with making collective preparations to avert and mitigate disasters. What role might current attempts to reinvigorate such safeguards play in navigating the Anthropocene? Regulations and safety nets are generally national, not global, and most rely, financially, on continuing growth; however, they often attract broad support, while promoting solidarity over unfettered individualism.

Why did Asia's boom, and the climate crisis, not arrive much sooner? Ghosh emphasizes imperialism as a widely felt retarding factor: it encouraged raw materials exports, discouraged some nascent industries, did little for worker health or education, and so on.<sup>46</sup> The historian in me wants more nuance here: the slow growth of Chinese popular

<sup>45</sup>Ghosh, *Great Derangement*, *op. cit.* note 7, 16–17.

<sup>46</sup>*Ibid.*, 109–10.

welfare from 1953 to 1978, for instance, mostly stemmed from national policies. And while I agree that the absence of an independent Asian industrial revolution reflected no inherent incapacity,<sup>47</sup> this may suggest that industrialization *anywhere* required unlikely conjunctures, rather than that Asia, left alone, would have industrialized sooner. But for Ghosh's purposes, it only matters that imperialism widened East-West differences, thus leaving time to avert disaster even long after a carbon-spewing West became rich.

If, indeed, a window for action remains exists partly because imperialism delayed non-Western prosperity—and because some Asians were appropriately skeptical about dreams of limitless growth<sup>48</sup>—this affects how we should allocate any sacrifices needed to make climate change less disastrous.<sup>49</sup> Ghosh's further observation that contemporary political/military competition—often continuations of older imperial rivalries—poses major obstacles to emissions reduction, independent of consumerism, makes climate politics look grimmer still.<sup>50</sup>

Ghosh does not support claims that historic injustices and contemporary inequalities give poorer countries a right to continue increasing emissions a while longer.<sup>51</sup> He sees many Asian leaders as willing to sacrifice millions of compatriots in a climate-driven “politics of attrition,” willing to suffer major disasters rather than abandon the carbon-intensive quest for greater national power. Many, he suggests are even willing to gamble that a more disaster-prone world can strengthen their countries relative to the currently less-populous and more-comfortable countries; they may face more disasters and be less able to mitigate harms, but the richer countries have fewer people to lose, and their citizens are less used to dealing with floods, power failures, and other such dislocations.<sup>52</sup> Equally darkly, Ghosh cites evidence that while public debate in the “Anglosphere” (the United States, the United Kingdom, Canada, Australia, and New Zealand) is almost uniquely infected with climate change denial, paralyzing the politics most accessible to citizens, their national security apparatuses are energetically preparing a politics of the “armed lifeboat,” which will protect the privileged while marginalizing poorer climate victims and their allies.<sup>53</sup>

Among the few hopeful political signs Ghosh sees are some religious pronouncements. Comparing the papal encyclical with the Paris climate accords, he notes that it is the former that predicts no *deus ex machina*, and thus confronts hard questions about sustainability.<sup>54</sup> Moreover, he suggests, religious worldviews can transcend national boundaries and address intergenerational justice more easily than secular worldviews.<sup>55</sup>

<sup>47</sup>*Ibid.*, 98–100.

<sup>48</sup>*Ibid.*, 110–12.

<sup>49</sup>Ghosh takes for granted that technological breakthroughs offer no solution unless values change, too. Ghosh does not discuss developments in clean energy technology, but it does seem unlikely that they will be adopted fast enough and widely enough under current political conditions. Nor are carbon emissions the only way that endless growth threatens sustainability.

<sup>50</sup>Ghosh, *Great Derangement*, *op. cit.* note 7, 146.

<sup>51</sup>*Ibid.*, 110–11.

<sup>52</sup>*Ibid.*, 147–48.

<sup>53</sup>*Ibid.*, 135–47.

<sup>54</sup>*Ibid.*, 150–59.

<sup>55</sup>*Ibid.*, 160–61. For instance, John Rawls explicitly concedes that his influential “difference principle” of justice does not apply to relations between the generations, in part because people in the

Thus, Ghosh argues, the encyclical is not only morally superior to the treaty, but more hard-headed.

Are the calculations of those preparing the “armed lifeboat” more solid than the representations of the climate diplomats? How aware are the planners of their limits? Discussing luxury homes and strategic facilities placed in very vulnerable locations, Ghosh emphasizes the blindness of many technocrats; elsewhere he makes their preparations sound more cynically rational.<sup>56</sup> The difference is politically crucial. If the “great derangement” of weather, virtually certain to devastate Dacca, can be reduced to an expensive inconvenience in New York, then the only remaining political recourse may be the historically weak reed of moral appeals; if believing New York can be protected represents a mental “great derangement,” appeals to enlightened self-interest might gain traction as that becomes clearer. Effective action requires both empiricism and imagination.

Some of Ghosh’s propositions are, inevitably, quite uncertain; but if they are mostly true, they have some specific implications for *JAS* readers. Scholars may not shape imaginations as powerfully as artists, but we do affect thinking about directly relevant matters, including Asian economies; protest movements; state structures; nationalisms; and the spread, transformation, and social implications of both indigenous and imported religions. Moreover, while the scenarios we explore must be plausible, our work often shows that what has happened was not the inevitable, nor even necessarily the most likely, outcome. Thus, our constraints may not be completely unlike those of realist fiction, which allows the unlikely—consider, for instance, Dickens’s many coincidences—while eschewing the impossible. One crucial, even essential, difference is that scholars are expected to *explicitly discuss* the probability of our assumptions, inferences, and conclusions, rather than hiding those uncertainties behind piles of reassuringly accurate detail. Yet that leaves enough commonality with narrative fiction that some of what Ghosh says about how the novel we need differs from the novel we have can also be a useful jumping-off point for asking how Asianist scholarship can help address the Anthropocene.

That we must examine how humans and nature are intertwined may be obvious by now, but remains easier said than done. What else? Moving beyond nations as default units of analysis is also logical and increasingly common. But the most global lens is not always best, even for global issues; in particular, treating “humanity” as a historical agent causes as many problems as it solves, since humanity is not only internally divided, but makes no decisions as a unit.<sup>57</sup> Many well-established genres, including histories of environment, consumption, and politics on multiple scales, remain highly relevant. Explorations of whether various Asian traditions provide viable alternatives to

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future, whom Rawls expects to be better off than their forebears, can do nothing to compensate those forebears. The lack of a framework for considering these issues is thus directly linked to the assumption that endless material progress is not only possible but likely. John Rawls, *A Theory of Justice* (Cambridge, Mass.: Harvard University Press, 1971), 284–93, especially 291.

<sup>56</sup>Ghosh, *Great Derangement*, *op. cit.* note 7, 34–37.

<sup>57</sup>See, e.g., Chakrabarty, “The Climate of History,” *op. cit.* note 44; for my own take, see Kenneth Pomeranz, “Teleology, Discontinuity and World History: Periodization and Some Creation Myths of Modernity,” *Asian Review of World Histories* 1, no. 2 (2013): 189–226.

(or forms of) developmentalism constitute obvious, but very difficult, topics.<sup>58</sup> Histories of homegrown (early) modernities represent a somewhat easier and more common variant of that inquiry, since they deal with what has already happened, rather than what might prove useful in the future. But by the same token, they are less directly relevant to the climate crisis; and ultimately they also become speculative, since no place in Asia remained permanently isolated from Western influences.

Finally, I would emphasize the necessity of being explicit about uncertainty in our work: not only about the limits of our evidence, but about how some vital questions remain unclear even with near-perfect information. Some occurrences of seemingly low-probability events indicate that we misunderstood the situation; others, only that “improbable” is not “impossible.” Statistics already tell us that; but explaining *how* particular improbabilities happen, and how to handle the fact that they always will, is another matter. To make just one suggestion: perhaps, just as Ghosh suggests that the banishing of science fiction from serious literature reflects a worldview we can no longer afford, it is likewise time to take more seriously the role of counterfactual reasoning in any history that cares about causes and effects, and to devote more energy to distinguishing responsible forms of counterfactual history from trivializing reflections on Cleopatra’s nose.<sup>59</sup>

It may seem odd that while Ghosh is calling for art to become less self-regarding than it has been recently, my response advocates scholarship that is, arguably, increasingly about scholarship—but the difference is easily bridged. Ghosh is complaining that modern art has increasingly searched itself rather than the exterior world for beauty, truth, and meaning—and often done so explicitly and prescriptively.<sup>60</sup> Scholars, however, have tended to say that we are discussing either things or words (including our own) about things—to present ourselves as *either* discourse analysts *or* positivists. In fact, however, good scholarship almost always holds on to the tension between words and objects, between “science” and “stories.” Exploring the varying degrees of probability in which we deal are vital tasks—perhaps especially in narrative work, where, as *The Great Derangement* reminds us, we badly need an enriched language for discussing realms in between absolute truth and fiction.

## AUTHOR’S RESPONSE

### Amitav Ghosh

#### 1.

To anyone who knows the work of Prasanna Parthasarathi, Julia Adeney Thomas, Fa-ti Fan, and Kenneth Pomeranz, it will be amply evident that *The Great Derangement* owes an enormous debt to their scholarship and their thinking, especially in regard to

<sup>58</sup>Prasenjit Duara, *The Crisis of Global Modernity: Asian Traditions and a Sustainable Future* (Cambridge: Cambridge University Press, 2015), is an important recent example.

<sup>59</sup>One collection that I think does this thoughtfully and is relevant to the concerns of Ghosh’s book is Philip E. Tetlock, Richard Ned Lebow, and Geoffrey Parker, eds. *Unmaking the West: “What-If?” Scenarios that Rewrite World History* (Ann Arbor: University of Michigan Press, 2006).

<sup>60</sup>Ghosh, *Great Derangement*, *op. cit.* note 7, 120.

imperialism, global scientific exchanges, and the trajectories of modernity in Asia and the West. That they in turn, and Rob Linrothe, have attended so carefully to this book is a true privilege for me: I am grateful to the *Journal of Asian Studies* for making it possible.

In reading the contributions to this round table I was forcibly struck by the recurrence of certain words: “imagining,” “imagination,” and “seeing.” These terms are of course central also to *The Great Derangement*, where, as Julia Adeney Thomas points out, I have tried to explore the ways in which “our modes of representation have derailed humanity, blinding us to our real condition.”

My main concern in the first part of *The Great Derangement* was with the techniques and suppositions of the contemporary literary novel. But, as Kenneth Pomeranz rightly observes, modes of storytelling in literature and the humanities have much in common, so much so that the constraints that shape the writing of history “may not be completely unlike those of realist fiction.”

This suggestion becomes even more interesting if we consider it in conjunction with the question that Dipesh Chakrabarty implicitly poses in his seminal essay “The Climate of History”:<sup>61</sup> is the Anthropocene a critique of the motifs that have guided the writing of human history over the last 250 years? These motifs—equality, social justice, and progress—all of which Chakrabarty subsumes under the “blanket category” of freedom, are of course ultimately derived from the emancipatory ideals of the Enlightenment. As such their influence extends far beyond the academic discipline of history: they are the guiding motifs of all the humanities and indeed of liberal-humanistic thought in general.

It follows, therefore, that in trying to identify the constraints that guide humanistic thinking we must give due attention to these motifs. In light of this, Pomeranz’s suggestion can be recast as the following question: is it possible that in relation to climate change the emancipatory motifs of humanistic thought function as blinders that restrict our range of vision?

The contributions to this forum hint at several ways in which this might be the case. Prasanna Parthasarathi, for instance, writes that our times “may be seen as an age of imperial denial.... In popular and even to some extent scholarly circles, it is difficult to persuade many that the present inequalities of the world are legacies of empire.”

The possibility that post-Enlightenment history may actually have exacerbated global inequalities and injustice is, of course, almost impossible to reconcile to an emancipatory vision of the past. This is certainly one of the reasons why “imperial denial” is so pervasive within the Academy and beyond.

But “imperial denial” is not only a disowning of the past: it is also, and perhaps more significantly, a disavowal of the realities of the present day. After all, the “present inequalities of the world” are not just bequests of history (as the term “legacies” implies); they are also outcomes produced by the contemporary world order. Consider the disparity in the coercive abilities of the United States and, say, the Philippines: the gap between them has not lessened since the end of the colonial era, far from it. If anything the difference is greater today than at any time in the past. In this sense, as Parthasarathi points out, empire is not only alive and well but is also an integral element of the history and political dynamics of climate change.

<sup>61</sup>Chakrabarty, “The Climate of History,” *op. cit.* note 44.

A hundred years ago, imperial power celebrated itself with parades, reviews, and durbars, perhaps because it was then still open to contestation and therefore needed to make itself visible. Today empire manifests itself instead as an everyday reality, something that undergirds the scaffolding of the world to such a degree that it is no longer distinguishable as power at all. It has come to be conceptualized instead as “cultural disparity” or “international income distribution” and so on. These rubrics are so effective in masking the connection between the international power structure and what Parthasarathi calls “the apparatus of violence that enforces our vast global inequalities” that the asymmetrical nature of those relations have become the unseen elephant in the room.

While writing *The Great Derangement* it became clear to me that the unacknowledged realities of contemporary power are themselves central, not just to the politics of climate change, but also to the discourse on the subject. The reason why emissions, consumption, income inequality, and other quantifiable metrics have come to dominate the discussion is precisely because disparities of power are both unquantifiable and difficult to acknowledge. This phenomenon is not so much “denial,” I think, as a blockage of some other kind, rooted quite possibly in the emancipatory motifs of humanist thought: those assumptions make it very difficult for liberal, well-intentioned people to accept and address the co-relation between greenhouse gas emissions and power.

Let me illustrate what I mean. One of the most admirable aspects of the discourse on climate change is the patent altruism and good intention of the scientists who have brought this crisis to the world’s attention. James Hansen, Michael Mann, Kevin Anderson, and many others have argued forcefully for global justice in carbon consumption, repeatedly acknowledging the relationship between income and greenhouse gas emissions, and conceding (or even insisting) that the world’s poor have a right to increase their emissions in order to improve their standards of living. Some of them have also made significant personal sacrifices, giving up air travel and going to great lengths to reduce their carbon consumption.

All of this is laudable, yet there is something that goes unacknowledged here: carbon consumption is not just (or even primarily) about wealth and standards of living. The questions that altruistically minded people need to consider then do not relate only to living standards and creature comforts: they must also address the question of whether they would be willing to sacrifice influence and power. Were this to be factored in, even the most well-intentioned people may be inclined to rethink their positions.

Few Western university professors would object, for example, to betterments in the economic conditions of the average Indian or Chinese person; nor would they greatly mind sacrificing a few conveniences in order to achieve that outcome. But how would they feel about putting themselves in a position where Chinese or Indian institutions of learning exert upon them the same influence that American universities exercise upon the world? Recent experience suggests that such an outcome would be strenuously resisted, by individuals and by institutions. The reality is that it is almost impossible to conceive of a situation in which Western universities or intellectuals would consent to rearranging their priorities in accordance with the needs and wishes of say, China, Russia, Indonesia, and India.

That the struggle for mitigatory action is ultimately a battle over who wields power over whom is perfectly well understood by those who oppose or obstruct it, silently, explicitly, or by subterfuge. Yet this context rarely figures in the discourse on climate

change, which continues to be ruled by emancipatory motifs. As a result, the struggle for mitigatory action has increasingly come to be conceptualized as a battle of ideas, or of conscience, even on the left.

Consider for example an argument advanced by Naomi Klein and George Monbiot among others: that the Abolitionist and Civil Rights movements were moral struggles that could serve as models for the climate campaign. I have the greatest respect and admiration for Klein and Monbiot, but it is clear to me that this analogy, unfortunately, does not hold. There are many reasons for this: the first is that many other political and historical factors were also critical to the success of both Abolitionism and the Civil Rights movement. In the case of the former, the context consisted (among many other things) of the political pressures generated by slave rebellions and the Haitian Revolution; moreover it was at just that time that another vast source of labor, indentured workers, became available because of Britain's rapidly expanding empire in India. Similarly, the political and ideological struggles of the Cold War were essential to the success of the Civil Rights movement. In neither case can it be said that the movement's success was brought about primarily through emancipatory idealism.

Secondly, while it is certainly true that the Abolitionist and Civil Rights movements improved the lives of a great number of people, it is true also that the prevalent structures of global power were not fundamentally changed by either of these movements. This however is precisely the effect that a more equitable global emissions regime would have. Nor has this facet of the issue eluded climate change negotiators: indeed it could be said that the Western approach to climate change negotiations has consistently been oriented towards the creation of an emissions regime that would change the global distribution of power as little as possible. This objective, which is both unacknowledged and probably impossible to attain, remains, in my view, the most important obstacle to effective mitigatory action.

Given the paucity of resources that are available to activists, it is not hard to understand why Klein and Monbiot would choose to present the struggle for mitigatory action within an idealistic frame. Yet, it is also important, tactically and otherwise, not to lapse into idealist readings of history: otherwise we run the danger of placing our faith in a kind of secular spiritualism.

Parthasarathi points, quite rightly, to the ways in which global structures of inequality amplify climate change and suggests that mitigatory efforts would be enhanced by reducing inequalities. There is an implicit assumption here, one that underlies much of the literature on climate justice: that people everywhere want fairness, equality, and justice for all. But the unfortunate truth is that where it concerns relations between classes, castes, clans, tribes, nations, and races this has never been the case; least of all has it been so in the post-Enlightenment era.

Were we to stop reading emancipatory motifs into the Anthropocene, we would be faced with questions of a different order. What if it is precisely the prospect of a reduction in global inequities—especially where it concerns coercive force—that motivates the world's powerful to drag their feet on climate change mitigation? What if the only way to prompt them to act more decisively were to persuade them that mitigatory action would *not* change the inequities of the present order; that the status quo would be preserved unaltered? What if drastic action on climate change can be achieved only at the cost of *abandoning* the emancipatory ideals that have come to undergird our thinking?

The ethical and political dilemmas that this possibility conjures up are almost impossible to resolve. What, for instance, should be the properly ethical course for a country like India? Knowing that its population will suffer disproportionately, should it, for the sake of preserving life, proceed to make radical cuts in emissions accepting that this will ensure the continuation of current inequalities, nationally and internationally? Or should it make all possible haste to improve living standards, at the cost of accelerated emissions, so that some may be better able to cope with what lies ahead? This is, after all, the strategy that has largely been adopted by the world's wealthy nations.

These dilemmas are almost never explicitly stated. Yet, arguably, they have a more immediate bearing on climate change negotiations than do many metrics that have been elaborated upon at great length, like climate budgets and so on.

## 2.

Julia Adeney Thomas's contribution suggests another way in which our imaginings of time and history influence our perception of the Anthropocene. Thomas argues that our blindness "to our real condition" and our failure to act are the result of the "distance between our abstract tools of understanding and the exuberant messiness of reality." This in turn is echoed by Linrothe in his comparison of his own way of looking at the mountains of Zangskar and that of a hereditary headman and monk who has lived there for all of his seventy-plus years. "In person or in photographs," writes Linrothe, "I do not *see* the difference that twenty-five of the deadliest years of the Anthropocene have made."

Here then is the question that haunts our age of cosmopolitan omniscience: everything in the phenomenal world has already been mapped, measured, and weighed. Yet we know that something eludes us, that we cannot understand glaciers in the manner of the Tlingit peoples of the Yukon and Alaska;<sup>62</sup> that we cannot read waves and currents as Polynesian navigators once did. Is it possible then that our inability is rooted in the ways in which we use such words as "mountain," "glacier," and "current," all of which invoke a cosmopolitan universalism, a commensurability and comparability of phenomena wherever they may exist? Have these very words become "abstract tools of understanding" that obscure other possibilities? After all, the monk from Zangskar would not claim to "see" the mountains of the Andes in the same way that he "sees" those that he and his forbears have lived with over generations. Nor would the Polynesian navigator claim to be able to read the currents of, say, the North Atlantic.

Indeed it is quite possible that the monk "sees" certain features of his landscape precisely because to him they are not "mountains," mere instances of a much larger class of things. They are specific, individualized presences with their own names, personalities, and moods. In short, to "see" in this way may also entail a blindness to other, like, phenomena.

But that is not the kind of seeing that Linrothe is seeking. For him "seeing" is much more than an act of perception: he is searching, in this instance, for a "recognition of our collective imperilment."

<sup>62</sup>See Julie Cruikshank, *Do Glaciers Listen?: Local Knowledge, Colonial Encounters, and Social Imagination* (Vancouver: University of British Columbia Press, 2005).

“Seeing” in this sense is a metaphor for looking ahead, for “vision.” It too imagines the passage of time as linear and directional; discernible within it are the same emancipatory motifs that guide the humanities and the arts—of history as a forward movement, shaped by human agency.

But what if history is something else altogether, demanding metaphors of an entirely different kind? What if, as Carl Schmitt proposed, history is a labyrinth through which humanity blindly reels, knowing neither its shape, entrance, or exit?<sup>63</sup>

Certainly there can be little doubt as to which vision of history is better fitted to the predicaments of the Anthropocene.

### 3.

Both Kenneth Pomeranz and Fa-ti Fan mention the last section of *The Great Derangement*, in which it is suggested that religious groupings may represent a sign of hope. Fa-ti Fan describes this gesture as “forced”—and he is probably right. A critical look at the world’s major religions suggests that the Catholic Church under Pope Francis is very much the exception—almost miraculously so—in its responsiveness to climate change. Other major religions have come increasingly to be dominated by “accelerationist” belief systems that seem almost to be borrowed from certain kinds of Protestantism. They now consist largely of differently packaged admixtures of growth fetishism<sup>64</sup> and identity politics. This is true, for example, of “Hindutva” in Narendra Modi’s India and of the officially approved version of Islam in Recep Tayyip Erdogan’s Turkey.

If growth fetishism is at all contested in Asia, it is only by a few Buddhist groups and figures, most notably the Dalai Lama. Certainly no one who travels in the continent at this time can be blind to the signs of ever-quickening acceleration: vast forests of concrete rising everywhere; perpetually expanding networks of highways, packed with fast-growing numbers of vehicles; rapidly proliferating airlines offering ever-cheaper flights. The momentum generated by this acceleration is such that it would take decades to reverse course even if Asian governments were willing and able to make significant changes. But a change of direction is nowhere a discernible priority: this is a vast machine fueled on the one hand by fusions of neo-liberalism and religion; and on the other by the enormously powerful industrial lobbies that now hold governments captive, across Asia and indeed the world.

In light of these realities, it is undeniable that the last section of *The Great Derangement* is “forced.” The only excuse I can offer is that I felt it necessary to look, as does nearly everyone who writes about climate change, for some rays of hope. Very few of us can claim to possess the clarity of vision that allowed Martin Heidegger to say, as he did half a century ago: “Only a god can save us.”<sup>65</sup>

<sup>63</sup>“Humanity reels blindly through a labyrinth that we call history, whose entrance, exit, and shape nobody knows.” Carl Schmitt, *Political Theology: Four Chapters on the Concept of Sovereignty*, trans. George Schwab (Chicago: University of Chicago Press, 1985), 59.

<sup>64</sup>This phrase is borrowed from Clive Hamilton, *Growth Fetish* (Crows Nest, Australia: Allen and Unwin, 2003).

<sup>65</sup>Interview, *Der Spiegel*, 1966.