

Climate Realism: The Aesthetics of Weather, Climate, and Atmosphere in the Anthropocene

Author(s): Lynn Badia, Marija Cetinić and Jeff Diamanti

Source: *Resilience: A Journal of the Environmental Humanities*, Vol. 7, No. 2-3, Climate Realism (Spring-Fall 2020), pp. 1-12

Published by: University of Nebraska Press

Stable URL: <https://www.jstor.org/stable/10.5250/resilience.7.2-3.0001>

REFERENCES

Linked references are available on JSTOR for this article:

https://www.jstor.org/stable/10.5250/resilience.7.2-3.0001?seq=1&cid=pdf-reference#references_tab_contents

You may need to log in to JSTOR to access the linked references.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



University of Nebraska Press is collaborating with JSTOR to digitize, preserve and extend access to *Resilience: A Journal of the Environmental Humanities*

JSTOR

Climate Realism

The Aesthetics of Weather, Climate,
and Atmosphere in the Anthropocene

LYNN BADIA, MARIJA CETINIĆ, AND JEFF DIAMANTI

This special issue of *Resilience* offers a new concept—*climate realism*—through which to read for the cultural and aesthetic forms of knowledge solicited by climate change. This issue gathers sustained engagements with cultural objects both formally and thematically invested in the realities of climate change, and it can be productively read in conjunction with the edited volume of the same title,¹ which collects new essays from a range of scholars in the humanities on the critical frameworks and genealogies needed to ground climate change theory. By considering the conjunction of climate and realism, the contributors assembled here put forward varied archives of thought necessary to both register and move through the pressure posed by a planet fully animated by anthropogenic climate change. This pressure is ecological, of course, insofar as the lifeworlds that create our planet are variously impacted by increasing temperatures; altered chemical profiles; and rapid shifts in the biosphere, atmosphere, hydrosphere, and cryosphere. However, this pressure is also cultural—our understanding of the changing dynamics of the planet is bound up with the narrative, visual, poetic, discursive, and ethical dynamics through which climate comes to matter.

As a proposition, then, climate realism names the cultural challenge of representing and conceptualizing climate in the era of climate crisis. Climate has traditionally referenced the weather it gathers, the mood it creates, and the settings it casts. In the era of the Anthropocene—the contemporary epoch in which geologic conditions and processes are indelibly shaped by human activity—climate indexes not only at-

mospheric forces but the whole of human history: the fuels we use, the lifestyles we cultivate, the industrial infrastructures and supply chains we build, and the possible futures we may encounter. In other words, with every weather event, we have become acutely aware that the forces indexed by climate are as much social, cultural, and economic as they are environmental, natural, and physical. While climate change itself remains independent of any structure of thought enlisted to know it (e.g., ocean acidification intensifies whether we notice it or not), at the same time, the multiple causes folded into the last two hundred years of industrial production, five hundred years of colonialism, and millennia of agricultural terraforming are intimately bound up with the reality of climate. This double bind of climate realism—climate as expressive of nonhuman systems as well as the materiality of human history—is the challenge to representation that the editors of this special issue aim to pursue.

Climate realism hones in on the emerging forms of representation and the limits of those forms that take up the epistemological, aesthetic, and ontological questions posed by a warming world. Contributors to this issue consider a range of representational modes such as climate fiction (cli-fi), landscape photography, weird cinema, contemporary art, science fiction, and the realist novel. While each of these forms comes with its own genealogies of thought, specificities of medium, and speculative procedures, they all manage to hold the past, present, and future tenses of climate in their instantiations, thus making available multiple scales of climate to an aesthetic experience. This unique capacity of aesthetic form to render multiple temporal scales as well as reorder knowledge derives from what Ian Baucom and Matthew Omelsky call the threshold of epistemology made available by, for instance, polyphonic voice in the novel, more-than-human perspectives in film, or immersive duration in installation art.² Yet we do not counterpose aesthetic representation as a corrective to other forms of meaning-making in the age of climate change—in other words, we do not suggest that the visual and discursive genres through which environmental science and policy represent climate change is flawed. Instead, we disclose that a different ordering of knowledge and perception underwrites aesthetic forms contending with the realities of climate change.

There are many informational genres tasked with carrying climate to various interpretive communities—newspapers, documentaries, miti-

gation strategies, scenarios plans, economic forecasts, and so on—and each brings a particular narrative structure, tone, relation to scale, and implied praxis. All these genres matter to the collective challenge to understand, mitigate, and adapt to the conditions of climate change, but so too do their formal strengths and limitations. Climate realism begins with the understanding that the entwined cultural, biological, and material feedback loops that mediate ecologies in the Anthropocene are informed by the formal parameters of how climate is known. In forwarding a name for the modalities of aesthetic form invested in holding the multiple scales, relations, and planetary dynamics of climate change to the affordances of specific genres, climate realism is also a claim that the real of climate change is in excess of the many forms of representation that we take to be the most operatively realistic today.

Taking up the question of how climate is rendered in the narrative structure of journalistic news outlets, for instance, Stephanie LeMenager argues that “climate change ‘news’ fails to be ‘news’ insofar as it implies an end to the everyday itself, since the everyday relies on human habit and its complement of forgetting.”³ News-driven representations of climate change figure large-scale storms, mass die-offs, and calving icebergs as events around which environmental breakdown marks itself for a reading public. These events, however, rarely travel to other sections of the newspaper—arguably the genre of representation tasked most explicitly with a realistic account of the present—meaning that the *condition* of living in a warming world remains external to the events that count as news. At the threshold of the event and the condition, LeMenager turns to cli-fi to find forms of knowledge and to practice a form of reading “at the edge of something, perhaps modernity, perhaps ‘humanity’ depending on how you define it.”⁴ For LeMenager, cli-fi blurs the boundaries between the weather section and the rest of the daily news.

As a subject, climate change seems to resist the mimetic tradition of realism, because its effects are planetary, gradual, and ultimately irreducible to human perspective. Climate change, for instance, assembles conflicting histories; it includes animal, vegetal, and geologic agencies; it resists an intellectual inheritance that puts cultural and natural forces on separate registers; and it puts differing notions of justice in direct confrontation. “Realist” representations of climate, therefore, demand experimentation, both in the aesthetic approach by which it assembles

the lifeworld and the ontologies it references and creates in the process. No longer thought of simply as mimetic, “realism” has been thoroughly reexamined for how it *creates* in the act of claiming to *represent* in the context of climatic and ecological change. In *Ecology without Nature*, for instance, Timothy Morton describes “ecomimesis” as representational acts that call forth the “sense of the reality of nature.” Through the devices of representation (which Morton identifies through several techniques, such as the medial, timbral, and Aeolian), ecomimesis erases “the difference between a perceptual event upon which we can focus” and the unreferable and self-contradictory “environment”—or what he will later call a “hyperobject.”⁵ In other words, ecomimesis is the aesthetic process by which an environment is summoned forth as an authentic and perceptible field for subjects that are cocreated in the aesthetic experience.

Given an ecological understanding of coconstituting material and cultural phenomena, it is significant that questions and theories formulated under the banner of realism have often been concerned with intervention, an aspect of realism only foregrounded today. As the crisis of climate calls forth human intervention to secure the human lifeworld, intellectual movements concerned with the materiality and ontology of life—posthumanism, new materialism, speculative realism, spectral realism, object-oriented ontology, capitalist realism—all comment on how we can access (conceptually and phenomenologically) the realities that are calling for an intentional human response. By putting these philosophical movements in conversation with aesthetics, this special issue and companion book ask to what degree realism has shifted from a framework grounded in reference to claims of objectivity or representational accuracy to a consciously acknowledged political and aesthetic *position* from which to build a framework for knowledge and action. In this way, we offer a claim that aesthetic acts are also ontological acts as they call forth a platform from which to intervene in the Anthropocene.

Climate Realism, then, is an occasion to rethink the aesthetics of climate in its myriad forms; to capture climate’s capacity to express embedded histories; to map the formal strategies of representation that have turned climate into cultural content; and to index embodied currents of past and future climates. How is realism—in both the aesthetic history of representation and the philosophical tradition that underwrites

it—transformed by contending with our new experience of climate in the Anthropocene? What, if anything, separates first and second nature in an age contoured by climate crisis, and what does this mean for a history of philosophy premised on their difference? In order to temper climate change—to apprehend its complexity, to address its short- and long-term consequences, to mitigate its many sources—*Climate Realism* offers to extend the ongoing explorations of new aesthetic theories and projects contending with climate change. These entries take up theoretically challenging questions about how climate change forces us to reconsider our classic philosophical categories and to revise the category of media itself in order to incorporate the inscriptive forces of the nonhuman and material world.

Naming and calling for a climate realism intentionally begins from the paradox of figuring climate's unrepresentable scale, force, and history and the distributed and uneven nature of its effects. What remains of our understanding of realism after the questions of its initial formulation have been completely remade by the historical and intellectual developments of the twentieth century? How do we confront the reality of climate change when, as Barbara Herrnstein Smith describes, reality can no longer be understood as singular? How do we confront climate change as a phenomenon when it requires us to intellectually and politically acknowledge the “existence of multiple, sometimes radically divergent, operative realities”?⁶

Much of the theoretical work in the social sciences and humanities has, of late, been dedicated to extrapolating a fuller account of this multiplicity as well as our embeddedness within larger complex geologies and ecologies. In Dipesh Chakrabarty's landmark theses on what he called “the climate of history,” this imbrication of human history with natural history is nothing short of a revolution in the way history, the human, as well as nature are now understood. Chakrabarty argues for the necessity of “bring[ing] together intellectual formations that are somewhat in tension with each other: the planetary and the global; deep and recorded histories; species thinking and critiques of capital.”⁷ Not by accident, this move to think the apposition of materiality and sociality is conditioned across what others are calling the return of realism by an interdisciplinary concern for climate. Chakrabarty's intervention is to admit a methodological tension imparted by Fernand Braudel's historiography of the seasons into the

discipline of history, and the humanities more generally, which is “the collapse of the age-old humanist distinction between natural history and human history.”⁸ Braudel, though, did not (and could not) go far enough, since the weight of global warming and ecological science had not yet mixed with historiography. By Chakrabarty’s account, more than fifty years later, humans are not only written on by weather, the seasons, and so on; humans, more striking still, “now wield a geological force.”⁹ At issue then for Chakrabarty is the demand for a nonanthropocentric standpoint able to keep the social realities of industrial capitalism and the material reality of global warming in focus.

Overlapping with Morton’s philosophical project of spectral realism is the growing field of philosophical or speculative realism, which, in the words of Quentin Meillessoux (in his *Après la finitude* [*After Finitude*]), set the stage for a new materialist theory of the real.¹⁰ Speculative realism separates the quantitative properties of the object world from the sensations that come from our relations to it. Challenging the formative axioms of Immanuel Kant’s philosophy of experiential knowledge, the speculative stance pursues materiality beyond the determination of firsthand experience in order to comprehend large-scale problems shared by humanists, social scientists, and physical scientists, such as climate, ecology, and geological transformation. In Meillessoux’s words, “science” since Copernicus “has exhibited thought’s actual capacity to probe ever more deeply into a world anterior to all humanity,” while at the same time, philosophers following Kant’s concession to science have organized a “Ptolemaic counter-revolution” placing the thinking subject back at the center of the world.¹¹

Meillessoux’s thesis works to develop the ecological gesture animating leading fields of inquiry in the humanities and social sciences, such as actor-network theory (Latour 2005),¹² agential realism (Barad 2007),¹³ and various strains of posthumanism. While new realisms concern themselves with a wide range of traditions and concepts, central to the shared field of inquiry are two epistemological challenges arising from climate science and the politics of global warming. First is the recognition that human subjectivity and agency is embedded in an ecological context that it is acted on as much as it acts on—or in Karen Barad’s words, it is “a matter of intra-acting.”¹⁴ Second, and as a consequence of the first, new realisms pursue a nonanthropocentric knowledge in order to horizontalize what Bruno Latour calls the social

networks of actors in the social and material settings that make up an environment. Climate change indexes hundreds of years of human emissions and is thus an externality that contains information about human history. Climate is recursive, not only to its own rhythms independent of the human, but to the environmental and atmospheric effects of fossil-fueled industrial society; and the inverse applies as well.

What had previously been understood as the background to human affairs, in Latour's provocative phrasing, has now become fully animated, while the drama of human history becomes paradoxically frozen in the face of the tempest.¹⁵ While a concept of animate materiality is not novel to this moment in social and political thought, what has shifted from beneath our feet is the very stability of ground from which to mediate the real and imagined relations that give form to collective human consciousness and the material entanglements that embed those relations in and on the ground. How can we know the realities of these accelerated, planetary dynamics when what we are as a species is both bound up as a source of shaky ground and under pressure precisely by the shakiness of that ground? This threshold of ontology and epistemology redefined by global warming—the delirium that comes to consciousness when the world becomes unfixed as a background, on the one hand, and the gradual realization, on the other hand, that the human is both a sociohistorical and a biophysical form of life knotted to earth systems—shifts the lens through which we might recognize the conventions of realism.

This shift cuts through all cultural media. Amitav Ghosh, for instance, poses this conundrum to the conventions of literary realism codified in the nineteenth century. He asks, Why have encounters with the “environmental uncanny” of severe weather rarely found their way into the prestige literature read by Western literary institutions as realism? “To introduce” what Ghosh calls “unheard-of weather phenomenon” into the novel is “to court eviction from the mansion in which serious fiction has long been in residence; it is to risk banishment to the humbler dwellings that surround the manor house—those generic outhouses that were once known by names such as ‘the Gothic,’ ‘the romance,’ or ‘the melodrama,’ and have now come to be called ‘fantasy,’ ‘horror,’ and ‘science fiction.’”¹⁶ The architectural metaphor here is important for its insistence on the scaffold through which the realist mode makes itself recognizable. For Ghosh, the mansion is built on probable

details that sediment in the background of narrative in the manner of verisimilitude, but the challenge for realism today is to detail the waterlogging of that mansion as it sinks beneath rising sea levels, catastrophic storms, exacerbated poverty, and weird weather. In the Pacific Islands, where Elizabeth DeLoughrey focalizes her cultural analysis of climate, the mansion is already under water.¹⁷ Might this mean that climate realism always already abandons the mansion of realism and takes flight on the lifeboats of “those generic outhouses” of literary history? Is climate realism always already gothic, romance, melodrama, fantasy, horror, weird, or science fiction?

Climate realism is a name for the effort to understand, figure, and respond to this recursive structure, as the contested complexity of knowledge- and world-making forces emerge as such in the Anthropocene. Selmin Kara and Cydney Langill’s contribution to this issue develops readings of the weirding that occurs in recent cinema invested in the otherworldliness of our planet. Building on recent phrasing from literary and cultural analysis of what Gerry Cannavan and Andrew Hagemen call “weird weather” in climate fiction, Selmin Kara and Cydney Langill offer close readings of two cultural objects that help define climate realism in terms of the strange and unfamiliar qualities of weather in a warming world. The definition of the weird that they pursue involves “a particular iteration of the Real, perceived in the era of climate change as something porous, difficult to grasp, and resistant to cognitive capture.” Their engagement with Boyle’s *Sunshine* (2007) and Garland’s *Ex-Machina* (2014) draws out the weirdness of planetary and climatic dynamics when rendered through posthuman technoscience using Timothy Morton and Mark Fisher’s theory of the weird.

Bruno Lessard’s contribution turns to speculative realism and hyperobjectivity to consider visually rendered landscapes of the Anthropocene. Lessard argues that the photographs of Edward Burtynsky, David Maisel, and Daniel Beltrá produce speculative orientations toward industrial indexes that are spread across landscapes too vast for comprehension on the ground. Large-scale photographs of open-pit mining, tailings ponds, or quarries taken from drone or helicopter push the indexical capacity of photography to its abstract limits. These limits, Lessard argues, are what make the genre generative for an ecological philosophy that begins with the admission that

the physical world is not fully present to thought or experience—it withdraws as much as it expresses. “Straddling the line between realism and abstraction,” Lessard argues, “these photographers’ images speculate on what the boundary between realist and abstract aesthetics should be in the twenty-first century and on the type of image that could be deemed a faithful artistic portrayal in the Anthropocene.”

Graig Uhlin analyzes the work of Chilean documentary filmmaker Patricio Guzmán to argue for a striking approach for thinking media in the Anthropocene. In his readings of Guzmán’s films, Uhlin reconsiders the spectrum of memories, cultural objects, and natural elements under the same umbrella of archival media: “The elements—for Guzmán, primarily earth and water—function as historical agents, and these films highlight how nature shapes the legibility of the past. . . . The political project of Guzmán’s recent documentaries is rooted in their attentiveness to and exploration of these nonhuman modes of mediation.”

In literary representation, Thomas Laughlin’s new reading of what he terms the “energy atmospherics” of Charles Dickens’s decades-long engagement with coal-powered social inequality, the interpretive task of reading for a climate realism pivots on the challenge of seeing the social in London’s soot. Important for this account of nineteenth-century climate realism is that the novel creates a discourse able to contain both physical and social valences of a given atmosphere, so that pollution is both a harm to health and an index of metabolic exchange between humans and nature during the great surge in industrial activity marking its moment. In the air of a Dickens novel, Laughlin argues, is the kernel of a climate realism that would prefigure the Anthropocene hypothesis by over a century.

In addition to literary, visual, and elemental media, this issue also features new work on the sonic archive. Kate Galloway examines the mimetic instrumental work of Canadian composer Derek Charke, who combines field recordings, electroacoustics, and instrumental music to convey acoustic information and visceral experiences of our changing acoustic ecologies. Galloway examines the often-overlooked *aurality* of climate change to consider how Charke’s work witnesses, circulates, and archives not only, for instance, the machine noise of resource extraction but also changing weather phenomena in our sound worlds. Galloway argues that these recorded sensory experiences of climate change, often

lacking from many other informational avenues of knowing climate, foreground the potential for art to spur climate activism.

Similarly, Melody Jue and Rafico Ruiz argue that we must listen, look, and feel the diversity of phenomena that are communicating to us about a changing planet. Jue and Ruiz analyze environmental artworks, particularly those at the 2015 United Nations Paris Convention, through the figure of the glacier and the performance of its melting. Their analysis figures the melting glacier as a form of media that is not only haptic and sonic; it also situates the phenomenon of a melting glacier—a hallmark index of a warming world—in narrative time. Jue and Ruiz argue that this aesthetic of “multisensory amplification” is “a tactic that emerges out of the particular use of glaciers in contemporary artwork,” and it is one that produces a direct experiential encounter with the phenomena of climate change and enables viewers to assemble narratives of ecological loss needed for human action.

In a parallel argument about human action, Brent Bellamy argues through a reading of Kim Stanley Robinson’s Mars trilogy that the blurring of lines between science and science fiction is also a question of political possibility. If realism involves the commitment to detail, on the one hand, and a mimetic impulse commensurate with those details, on the other, how, then, do the multiply temporal, spatial, and ontological scales enlivened and unleashed by anthropogenic climate change alter the operations of realism today? For Bellamy, the lesson is crucial to any climate realism: “Thinking of climate realism as both a political stance and a representational strategy holds open the possibility that the status quo is not the only thing within the grasp of the multitudes who, now just as in Robinson’s trilogy, will need to find new homes.”

Finally, Chris Malcolm analyzes how artistic and theoretical engagements with climate change create a persistent frame of human “ecocomplicity” that ultimately shapes our ethical determinations and actions. Contemporary discourses of the Anthropocene are haunted, he argues, by their attachments to ongoing histories of settler colonialism and racial slavery that are inseparable from the rise of industrial modernity. Even those discourses that attempt to track environmental harm continue to decide in favor of a racialized social reality, and they ultimately shape much work in the environmental humanities. Malcolm ultimately argues that ecocomplicity, as a performance of responsibility, is ultimately insufficient: “Conceding one’s complicity is a tarrying with, but

an eventual acceptance of, social costs, however, because, at bottom, social reality continues to provide for these subjects.”

Lynn Badia is an assistant professor of English at Colorado State University, where she specializes in environmental and energy humanities. In 2015 she was a visiting scholar at the University of Cambridge, as part of the Climate Histories Research Group, at the Cambridge Centre for Research in the Arts, Social Sciences, and Humanities. She was a Banting Postdoctoral Fellow (2015–17) and the Canada Research Chair in Cultural Studies Postdoctoral Fellow (2014–15) at the University of Alberta, focusing on research in the field of energy humanities. Badia’s work is published by interdisciplinary venues, including *American Quarterly*, *Cultural Studies*, *Open Library of the Humanities*, and *Nineteenth-Century Contexts*, among others. Her book manuscript *Imagining Free Energy: Fantasies, Utopias, and Critiques of America* introduces “free” or unlimited energy as a critical framework for understanding American society since the beginning of the industrial era.

Marija Cetinić is on the faculty of the humanities at the University of Amsterdam. Cetinić recently completed a position as assistant professor in the Department of English at York University in Toronto. She held a SSHRC Postdoctoral Fellowship in the Department of English and Film Studies at the University of Alberta. “Signs of Autumn: The Aesthetics of Saturation,” her current project, focuses on the concept of saturation and on developing its implications for the relation of contemporary art and aesthetics to political economy. Her essays have appeared in *Mediations*, *Discourse*, and the *European Journal of English Studies*. “House, Library, Field: The Aesthetics of Saturation” appears as a chapter in *Neoliberalism, Value, and Jouissance*, edited by Art, Critique, Theory (Seoul: Booknomad, 2013). Her chapter on “Affect” appears in *A Companion to Critical and Cultural Theory*, edited by Imre Szeman, Sarah Blacker, and Justin Sully (Oxford, UK: John Wiley and Sons, 2017).

Jeff Diamanti is an assistant professor of environmental humanities at the University of Amsterdam. In 2016–17 he was the Media@McGill Postdoctoral Fellow in Media and the Environment, when he coconvened the international colloquium on Climate Realism. His work tracks the political and media ecology of fossil fuels and has appeared in the journals *Radical Philosophy*, *Postmodern Culture*, *Mediations*, *Western American Literature*, *Krisis*, and *Reviews in Cultural Theory*, as well as in the books *Fueling Culture: 101 Words for Energy and Environment*, edited by Imre Szeman, Jennifer Wenzel, and Patricia Yaeger (New York: Fordham University Press, 2017) and *A Companion to Critical and Cultural Theory* (Oxford: John Wiley and Sons, 2017).

Diamanti has edited a number of book and journal collections including *Contemporary Marxist Theory: A Reader* (London: Bloomsbury Academic, 2014), *Materialism and the Critique of Energy* (Chicago: MCM, 2018), *Energy Culture: Art and Theory on Oil and Beyond* (Morgantown: West Virginia University Press, 2019), and *Bloomsbury Companion to Marx* (London: Bloomsbury, 2018), as well as a special issue of *Reviews in Cultural Theory* on energy humanities. He is working on a book called “Climate and Capital in the Age of Petroleum: Locating Terminal Landscapes” for Bloomsbury. With Amanda Boetzkes, he coorganizes “At the Moraine,” an ongoing research project on the political ecology of glacial retreat in the Arctic.

NOTES

1. Lynn Badia, Marija Cetinić, and Jeff Diamanti, eds., *Climate Realism: The Aesthetics of Weather, Climate, and Atmosphere* (Abingdon, UK: Routledge, forthcoming).
2. Ian Baucom and Matthew Omelsky, “Knowledge in the Age of Climate Change,” *SAQ* 116, no. 1 (2017): 7.
3. Stephanie LeMenager, “Climate Change and the Struggle for Genre,” in *Anthropocene Reading: Literary History in Geologic Times*, ed. Tobias Menely and Jesse Oak Taylor (University Park: Pennsylvania State University Press, 2017), 221.
4. LeMenager, “Climate Change and the Struggle for Genre.”
5. Timothy Morton, *Ecology without Nature: Rethinking Environmental Aesthetics* (Cambridge, MA: Harvard University Press, 2007), 47; Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis: University of Minnesota Press, 2013).
6. Barbara Herrnstein Smith, “Perplexing Realities: Practicing Relativism in the Anthropocene,” in Badia, Cetinić, and Diamanti, *Climate Realism*.
7. Dipesh Chakrabarty, “The Climate of History: Four Theses,” *Critical Inquiry* 35, no. 2 (2009): 201.
8. Dipesh Chakrabarty, “The Climate of History,” 201.
9. Dipesh Chakrabarty, “The Climate of History,” 206.
10. Quentin Meillessoux, *After Finitude*, trans. Ray Brassier (London: Bloomsbury, 2006).
11. Meillessoux, *After Finitude*, 120.
12. Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (London: Oxford University Press, 2005).
13. Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, NC: Duke University Press, 2007).
14. Barad, *Meeting the Universe Halfway*, 112.
15. See Bruno Latour, “Agency at the Time of the Anthropocene,” *New Literary History* 45 (2014): 1–18.
16. Amitav Ghosh, *The Great Derangement* (Chicago: University of Chicago Press, 2016), 23.
17. Elizabeth DeLoughrey, *Allegories of the Anthropocene* (Durham, NC: Duke University Press, 2019), 134.