

Elizabeth A. Povinelli

# Geontologies: The Concept and Its Territories

e-flux journal #81 — april 2017 [Elizabeth A. Povinelli](#)  
[Geontologies: The Concept and Its Territories](#)

01/11

Many attribute the crumbling of the self-evident distinction between Life and Nonlife to the challenge that climate change poses in the geological era of the Anthropocene.<sup>1</sup> Since Eugene Stoermer first coined the term “Anthropocene” and Paul Crutzen popularized it, the Anthropocene has meant to mark a geologically defined moment when the forces of human existence began to overwhelm all other biological, geological, and meteorological forms and forces and displace the Holocene. That is, the Anthropocene marks the moment when human existence became the determinate form of planetary existence – and a malignant form at that – rather than merely the fact that humans affect their environment. It’s hardly an uncontroversial concept. Even those geologists who support it do not agree on what criteria should be used to date its beginning. Many criteria and thus many dates have been proposed. Some place it at the beginning of the Neolithic Revolution when agriculture was invented and the human population exploded. Others peg it to the detonation of the atomic bomb, an event that left radioactive sediments in the stratigraphy and helped consolidate a notion of the earth (Gaia) as something that could be destroyed by human action and dramatize the difference between Life as a planetary phenomenon and Nonlife as a coldness of space. Hannah Arendt’s 1963 reflections on the launching of Sputnik and the lost contact “between the world of the senses and the appearances and the physical worldview” would be important here; as would be James Lovelock’s Gaia hypothesis published two years later in the wake of the revolutionary Apollo 8 picture of earthrise, broadcast live on Christmas Eve 1968.<sup>2</sup> Still others situate the beginning of the Anthropocene in the coal-fueled Industrial Revolution. While the British phrase “like selling coal to Newcastle” was first recorded in 1538, reminding us of the long history of coal use in Europe, the Industrial Revolution massively expanded the Lancashire, Somerset, and Northumberland coalfields in the eighteenth century, setting off a huge carbon bomb by releasing unheard of tons of hydrocarbons into the atmosphere and resulting in our present climate revolution and, perhaps, the sixth great extinction.<sup>3</sup> But the exploitation of the coalfields also uncovered large stratified fossil beds that helped spur the foundation of modern geologic chronology: the earth as a set of stratified levels of being and time. In other words, the concept of the Anthropocene is as much a product of the coalfields as an analysis of their formation insofar as the fossils within the coalfields helped produce and secure the modern discipline of geology and biology. But even as the coalfields

02/11



Karrabing Film Collective, *Windjarrameru, The Stealing C\*nt\$*, 2015. Film still

helped create the modern disciplines of biology and geology, the carbon bomb it set off also slowly and then seemingly suddenly made these disciplinary distinctions differences of a different sort. From the perspective of the planetary carbon cycle, what difference does the difference between Life and Nonlife make? What new disciplinary combinations and alliances are necessary under the pressure of Anthropogenic climate change? Moreover, if industrial capital was the cause of the modern discipline of geology and thus the secret origin of the new geological era and its disciplinary supports, why didn't we name and shame it rather than the Human? Indeed, Jason W. Moore has suggested that what we are calling the Anthropocene might be more accurately called the Capitalocene – what we are really witnessing are the material conditions of the last five hundred years of capitalism.<sup>4</sup> In Dennis Dimick's poetic rephrasing, the Anthropocene and climate change reflect nothing so much as industrial capitalism's dependence on "ancient sunshine."<sup>5</sup> Other names proliferate: the Plantationocene, the Anglocene, the Chthulucene ...

How and why various scholars choose one geohistorical nomenclature or peg over another helps illuminate how geontopower is supported in, and supports, natural life and critical life, and the ways in which all specific forms of existence, whether humans or others, are being governed in late liberalism. As the authors of a recent piece in *Nature* note, changes to the earth system are heterogeneous and diachronous, diffused and differential geographies that only appear as instantaneous earth events when viewed from the perspective of millions of years of stratigraphic compression.<sup>6</sup> But while all stratigraphic markers necessitate a "clear, datable marker documenting a global change that is recognizable in the stratigraphic record, coupled with auxiliary stratotypes documenting long-term changes to the Earth system," the Anthropocene presents a specific problem insofar as it cannot rely "on solid aggregate mineral deposits ('rock') for the boundary"; it is "an event horizon largely lacking fossils" and thus must find a different basis for a global boundary stratotype section and point (a GSSP) "to formalize a time unit that extends to the present and thereby implicitly includes a view of the future."<sup>7</sup> What is the clearest, materially supportable, and socially disinterested evidence of this new geological age: the carbon layer left from the Industrial Revolution, the CO<sub>2</sub> from the changing climate, the atomic signature that followed the atomic bomb?

Contemporary critical theorists may scoff at the idea that any of these markers are disinterested facts in the ground, but we will see

that, from a specific and important angle, critical theory iterates rather than contests key desires of the natural sciences. I take up this point elsewhere. Here it is useful merely to point out how each way of marking the key protagonists in the drama of the Anthropocene results in a different set of ethical, political, and conceptual problems and antagonisms rather than any one of these exiting the contemporary dilemma of geontopower. For instance, from the most literal-minded point of view, the Anthropocene contrasts the human actor to other biological, meteorological, and geological actors. The Human emerges as an abstraction on the one side with the Nonhuman world on the other. When did humans become the dominant force on the world? This way of sorting the world makes sense only from the disciplinary logic of geology, a disciplinary perspective that relies on natural types and species logics. From a geological point of view, the planet began without Life, with Nonlife, out of which, somehow, came sorts of Life. These sorts evolved until one sort threatened to extinguish not only its own sort but all sorts, returning the planet to an original lifelessness. In other words, when the abstraction of the Human is cast as the protagonist of the Anthropocene, a specific set of characters crowd the stage – the Human, the Nonhuman, the Dead, the Never Alive. These characters act out a specific drama: the end of humans excites an anxiety about the end of Life and the end of Life excites an anxiety about the transformation of the blue orb into the red planet, earth becoming Mars, unless Mars ends up having life ... Just as things are getting frothy, however, someone in the audience usually interrupts the play to remind every one that Life and Nonlife and the Human and the Nonhuman are abstractions and distractions from the fact that humans did not create this problem. Rather, a specific mode of human society did, and even there, specific classes and races and regions of humans. After this interruption the antagonism shifts and the protagonists are neither humans and other biological, meteorological, and geological forces, nor Life and Nonlife. The antagonism is between various forms of human life-worlds and their different effects on the given-world.

But none of these ways of narrating the protagonists and antagonists of geontopower provide a clear social or political solution. For example, if we keep our focus on the effect that a mode of human sociality, say liberal capitalism, is having on other forms of life, should we democratize Life such that all forms of existence have a say in the present use of the planet? Or should some forms of existence receive more ballots, or more weight in the voting, than

03/11

e-flux journal #81 — april 2017 Elizabeth A. Povinelli  
Geontologies: The Concept and Its Territories

04/11



Karrabing Film Collective, *Windjarrameru, The Stealing C\*nt\$*, 2015.

others? Take the recent work of the anthropologist Anna Tsing in which she mobilizes the matsutake mushroom to make the case for a more inclusive politics of well-being; a political imaginary which conceptualizes the good as a world in which humans and nonhumans alike thrive. And yet this thriving is, perhaps as it must be, measured according to specific human points of view, which becomes clear when various other species of fungi come into view – for instance, those tree fungi that thrive in agricapital nurseries such as *Hevea* root fungal parasites: *Rigidoporus lignosus* and *Phellinus noxius*. I might not want plantation capitalism to survive, but *R. lignosus* and *P. noxius* certainly do. *P. noxius* is not noxious from the point of view of nowhere but because it can be understood as the companion species to a specific form of human social existence, agricapitalism. So will I deny *P. noxius* a ballot? What will it have to agree to do and be before I agree to give it one? What else will need to abide by my rule in this new war of the world – those minerals, lakes, air particles, and currents that thrive in one formation but not another? “Sustainability” can quickly become a call to conceive a mode of (multi)existence that is pliant to our desires even as political alliances become very confusing. After all, *P. noxius* may be the best class warrior we now have. It eats up the conditions of its being and it destroys what capital provides as the condition of its normative extension. True, it eats up a whole host of other forms of existence in the process. But class war is not a gentle affair. When we become exhausted trying to solve this problem, we can swap our telescope for a set of binoculars, looking across the specific human modes of existence in and across specific social geographies. In other words, we can give up trying to find a golden rule for universal inclusion that will avoid local injustices and focus on local problems. Say, in the case of this text, I stake an allegiance with my Indigenous friends and colleagues in the Northern Territory of Australia. Here we see that it is not humans who have exerted such malignant force on the meteorological, geological, and biological dimension of the earth but only some modes of human sociality. Thus we start differentiating one sort of human and its modes of existence from another. But right when we think we have a location – these versus those – our focus must immediately extend over and outward. The global nature of climate change, capital, toxicity, and discursivity immediately demands we look elsewhere than where we are standing. We have to follow the flows of the toxic industries whose by-products seep into foods, forests, and aquifers, and visit the viral transit lounges that join species through disease vectors. As we stretch the local across these

05/11

e-flux journal #81 — april 2017 Elizabeth A. Povinelli  
Geontologies: The Concept and Its Territories

seeping transits we need not scale up to the Human or the global, but we cannot remain in the local. We can only remain *hereish*.

In other words, the Anthropocene and its companion concept of climate change should not be seen merely as meteorological and geological events but as a set of political and conceptual disturbances that emerged in the 1960s – the radical environmental movement, Indigenous opposition to mining, the concept of Gaia and the whole earth – and these disturbances are now accelerating the problem of how late liberalism will govern difference and markets globally. My purpose is not to adjudicate which antagonisms and protagonists we choose but to demonstrate how the object of concern has taken residence in and across competing struggles for existence, implicating how we conceptualize scale, event, circulation, and being. No matter how geologists end up dating the break between the Holocene and Anthropocene, the concept of the Anthropocene has already had a dramatic impact on the organization of critical thought, cultural politics, and geopolitical governance in and across the global north and south. And this conceptual impact is one of the effects and causes of the crumbling of the self-evident distinction of Life and Nonlife, fundamental to biopolitics. As the geographer Kathryn Yusoff notes, biopolitics is increasingly “subtended by geology.”<sup>8</sup> The possibility that humans, or certain forms of human existence, are such an overwhelming malignant force that Life itself faces planetary extinction has changed the topical foci of the humanities and humanistic social sciences and the quantitative social sciences and natural sciences.<sup>9</sup> The emergence of the geological concept of the Anthropocene and the meteorological modeling of the carbon cycle, the emergence of new synthetic natural sciences such as biogeochemistry, the proliferation of new object ontologies (new materialists, speculative materialists, speculative realists, and object-oriented ontologies), all point to the perforating boundary between the autonomy of Life and its opposition to and difference from Nonlife. Take, for example, the humanities.

As the future of human life – or a human way of life – is put under pressure from the heating of the planet, ontology has reemerged as a central problem in philosophy, anthropology, literary and cultural studies, and in science and technology studies. Increasingly not only can critical theorists not demonstrate the superiority of the human to other forms of life – thus the rise of posthumanist politics and theory – but they also struggle to maintain a difference that makes a difference between all forms of Life and the category of Nonlife. Critical theory has

increasingly put pressure on the ontological distinctions among biological, geological, and meteorological existents, and a posthuman critique is giving way to a post-life critique, being to assemblage, and biopower to geontopower. What status should objects have in various Western ontologies? Are there objects, existents, or only fuzzy assemblages? Are these fuzzy assemblages lively too? Anthropologists have weighed in on these more typically philosophical questions by transforming an older interest in social and cultural epistemologies and cosmologies into a concern about multiple ontologies.<sup>10</sup> But perhaps these academic disciplines are only catching up to a conversation begun in literature such as Don DeLillo's *White Noise*, and certainly in the literary output of Margaret Atwood, starting with *The Handmaid's Tale*, and continuing through her MaddAddam Trilogy. Now an entire field of ecoliterary studies examines fictional, media, and filmic explorations of the coming postextinction world.

And this leads to my second point. As we become increasingly captured by the competing claims of precarious natures and entangled existences, a wild proliferation of new conceptual models, figures, and tactics is displacing the conceptual figures and tactics of the biopolitical and necropolitical. For the purpose of analytical explication, I cluster this proliferation around three figures: the Desert, the Animist, and the Virus. To understand the status of these figures, two points must be kept firmly in mind. First, as the geontological comes to play a larger part in the governance of our thought, other forms of existence (other existents) cannot merely be included in the ways we have understood the qualities of being and life but will need, on the one hand, to displace the division of Life and Nonlife as such and, on the other hand, to separate themselves from late liberal forms of governance. In other words, these figures, statics, and discourses are diagnostic and symptomatic of the present way in which late liberalism governs difference and markets in a differential social geography. Therefore, the three figures of geontopower are, from one perspective, no different than Foucault's four figures of biopower. The hysterical woman (a hystericization of women's bodies), the masturbating child (a pedagogization of children's sex), the perverse adult (a psychiatrization of perverse pleasure), and the Malthusian couple (a socialization of procreative behavior): Foucault cared about these figures of sexuality and gender not because he thought that they were the repressed truth of human existence but because he thought they were symptomatic and diagnostic of a

modern formation of power. These four figures were both expressions of biopower and windows into its operation. Although, when presenting his lectures, compiled in *Society Must Be Defended*, Foucault discussed the insurrection of subjugated knowledges, understanding these figures as subjugated in the liberal sense of oppressed subjects would be wrong-headed. The problem was not how these figures and forms of life could be liberated from subjugation but how to understand them as indicating a possible world beyond or otherwise to their own form of existence – how to understand them as a way station for the emergence of something else. How might the hysterical woman, the masturbating child, the Malthusian couple, and the perverse adult become something other than what they were? And how could whatever emerged out of them survive the conditions of their birth? How could they be invested with qualities and characteristics deemed sensible and compelling before being extinguished as a monstrosity?<sup>11</sup>

A similar approach can be taken in relationship to the Desert, the Animist, and the Virus. Each of these figures provides a mechanism through which we can conceive of the once presupposed but now trembling architectures of geontological governance. Again, these figures and discourses are not the exit from or the answer to biopolitics. They are not subjugated subjects waiting to be liberated. Geontology is not a crisis of life (*bios*) and death (*thanatos*) at a species level (extinction), or merely a crisis between Life (*bios*) and Nonlife (*geos*, *meteoros*). Geontopower is a mode of late liberal governance. And it is this mode of governance that is trembling. Moreover, and this is the second point, because the Desert, the Animist, and the Virus are tools, symptoms, figures, and diagnostics of this mode of late liberal governance, perhaps most clearly apparent in settler late liberalism than elsewhere, they might need to be displaced by other figures in other places if these other figures seem more apparent or relevant to governance in these spaces. But it seems to me that at least in settler late liberalism, geontology and its three figures huddle just inside the door between given governance and its otherwise, trying to block entrance and exit and to restrict the shape and expanse of its interior rooms. Or we can think of these figures as a collection of governing ghosts who exist in between two worlds in late settler liberalism – the world in which the dependent oppositions of life (*bios*) and death (*thanatos*) and of Life (*bios*) and Nonlife (*geos*, *meteoros*) are sensible and dramatic and the world in which these enclosures are no longer, or have never been,

06/11

e-flux journal #81 — april 2017 Elizabeth A. Povinelli  
Geontologies: The Concept and Its Territories

07/11



Karrabing Film Collective, *When the Dogs Talked*, 2014. Film still.

relevant, sensible, or practical.

Take the Desert and its central imaginary Carbon. The Desert comprises discourses, tactics, and figures that restabilize the distinction between Life and Nonlife. It stands for all things perceived and conceived as denuded of life – and, by implication, all things that could, with the correct deployment of technological expertise or proper stewardship, be (re)made hospitable to life. The Desert, in other words, holds on to the distinction between Life and Nonlife and dramatizes the possibility that Life is always at threat from the creeping, desiccating sands of Nonlife. The Desert is the space where life was, is not now, but could be if knowledges, techniques, and resources were properly managed. The Carbon Imaginary lies at the heart of this figure and is thus the key to the maintenance of geontopower. The Carbon Imaginary lodges the superiority of Life into Being by transposing biological concepts such as metabolism and its key events, such as birth, growth-reproduction, death, and ontological concepts, such as event, *conatus/affectus*, and finitude. Clearly, biology and ontology do not operate in the same discursive field, nor do they simply intersect. Nevertheless, the Carbon Imaginary reinforces a scarred meeting place where each can exchange conceptual intensities, thrills, wonders, anxieties, perhaps terrors, of the other of Life, namely the Inert, Inanimate, Barren. In this scarred space, the ontological is revealed to be biontology. Being has always been dominated by Life and the desires of Life.

Thus, the Desert does not refer in any literal way to the ecosystem that, for lack of water, is hostile to life. The Desert is the affect that motivates the search for other instances of life in the universe and technologies for seeding planets with life; it colors the contemporary imaginary of North African oil fields; and it drives the fear that all places will soon be nothing more than the setting within a Mad Max movie. The Desert is also glimpsed in both the geological category of the fossil insofar as we consider fossils to have once been charged with life, to have lost that life, but as a form of fuel can provide the conditions for a specific form of life – contemporary, hypermodern, informationalized capital – and a new form of mass death and utter extinction; and in the calls for a capital or technological fix to anthropogenic climate change. Not surprisingly then the Desert is fodder for new theoretical, scientific, literary, artistic, and media works from the Mad Max films and science fiction of Philip K. Dick's *Martian Time-Slip* to the poetics of Juliana Spahr's *Well Then There Now*.

At the heart of the figure of the Animist lies the imaginary of the Indigene. Whereas the

Desert heightens the drama of constant peril of Life in relation to Nonlife, the Animist insists that the difference between Life and Nonlife is not a problem because all forms of existence have within them a vital animating, affecting force. Certain social and historical populations are charged with always having had this core Animist insight – these populations are mainly located in settler colonies but also include pre-Christian and pre-Islamic populations globally, the contemporary recycling subject,<sup>12</sup> new Paganism, actant-based science and technology studies, and certain ways of portraying and perceiving a variety of new cognitive subjects. For instance, the psycho-cognitive diagnosis of certain forms of autism and Aspergers are liable to fall within the Animist. Temple Grandin is an exemplary figure here, not merely for her orientation to nonhuman life (cows), but also for her defense of those alternative cognitions that allow for an orientation to Nonlife forms of existence. The Animist has also animated a range of artistic explorations of nonhuman and inorganic modes of agency, subjectivity, and assemblage, such as Laline Paul's novel *The Bees* and in the Italian film *Le Quattro Volte*. The Animist is, in other words, all those who see an equivalence between all forms of life or who can see life where others would see the lack of life.

The theoretical expression of the Animist is most fully developed in contemporary critical philosophies of vitalism. Some new vitalists have mined Spinoza's principles of *conatus* (that which exists, whether living or nonliving, strives to persevere in being) and *affectus* (the ability to affect and be affected) to shatter the division of Life and Nonlife; although others, such as John Carriero, have insisted that Spinoza uncritically accepted that living things are "more advanced" than nonliving things and "that there is more to a cat than to a rock."<sup>13</sup> The American pragmatist Charles Sanders Peirce has also inspired new vitalist scholarship – for instance, Brian Massumi has long probed Peirce's semiotics as grounds for extending affect into nonliving existents.<sup>14</sup> To be sure the interest in "vital materialism," to quote from Jane Bennett's work, does not claim to be interested in life per se. Rather it seeks to understand the distribution of quasi-agencies and actants across nonhuman and human materials in ways that disturb the concepts of subject, object, and predicate. And yet it is right here that we glimpse the power of the Carbon Imaginary – the suturing of dominant forms of conceptual space in late liberalism by the reciprocal transpositions of the biological concepts of birth, growth-reproduction, and death and the ontological concepts of event, *conatus/affectus*, and finitude. The new vitalisms take advantage of the longstanding

08/11

e-flux journal #81 — april 2017 Elizabeth A. Povinelli  
Geontologies: The Concept and Its Territories



Western shadow imposition of the qualities of one of its categories (Life, Leben) onto the key dynamics of its concept of existence (Being, Dasein). Removed from the enclosure of life Leben as Dasein roams freely as a form of univocal vitality. How, in doing this, are we disallowing whatever Nonlife is standing in for to affect whatever Life is an alibi for? What are the traps that this strategic response sets for critical theory? How does this ascription of the qualities we cherish in one form of existence to all forms of existences reestablish, covertly or overtly, the hierarchy of life?<sup>15</sup>

Finally, the Virus and its central imaginary of the Terrorist provide a glimpse of a persistent, errant potential radicalization of the Desert, the Animist, and their key imaginaries of Carbon and Indigeneity. The Virus is the figure for that which seeks to disrupt the current arrangements of Life and Nonlife by claiming that it is a difference that makes no difference not because all is alive, vital, and potent, nor because all is inert, replicative, unmoving, inert, dormant, and enduring. Because the division of Life and Nonlife does not define or contain the Virus, it can use and ignore this division for the sole purpose of diverting the energies of arrangements of existence in order to extend itself. The Virus copies, duplicates, and lies dormant even as it continually adjusts to, experiments with, and tests its circumstances. It confuses and levels the difference between Life and Nonlife while carefully taking advantage of the minutest aspects of their differentiation. We catch a glimpse of the Virus whenever someone suggests that the size of the human population must be addressed in the wake of climate change; that a glacial granite mountain welcomes the effects of air conditioning on life; that humans are kudzu; or that human extinction is desirable and should be accelerated. The Virus is also Ebola and the waste dump, the drug-resistant bacterial infection stewed within massive salmon and poultry farms, and nuclear power; the person who looks just like “we” do as she plants a bomb. Perhaps most spectacularly the Virus is the popular cultural figure of the zombie – Life turned to Nonlife and transformed into a new kind of species war – the aggressive rotting undead against the last redoubt of Life. Thus the difference between the Desert and the Virus has to do with the agency and intentionality of nonhuman Life and Nonlife. Whereas the Desert is an inert state welcoming a technological fix, the Virus is an active antagonistic agent built out of the collective assemblage that is late liberal geontopower. In the wake of the late liberal crises post-9/11, the crash of financial markets, and Anthropogenic climate change, the Virus has been primarily

associated with fundamentalist Islam and the radical Green movement. And much of critical thought has focused on the relationship between biopolitics and biosecurity in the wake of these crises. But this focus on biosecurity has obscured the systemic reorientation of biosecurity around geo-security and meteorosecurity: the social and ecological effects of climate change.<sup>16</sup> Thus the Virus is also recognition’s internal political other: environmentalists inhabiting the borderlands between activists and terrorists across state borders and interstate surveillance. But while the Virus may seem to be the radical exit from geontopower at first glance, to be the Virus is to be subject to intense abjection and attacks, and to live in the vicinity of the Virus is to dwell in an existential crisis.

As I am hoping will become clear, Capitalism has a unique relation to the Desert, the Animist, and the Virus insofar as Capitalism sees all things as having the potential to create profit; that is, nothing is inherently inert, everything is vital from the point of view of capitalization, and anything can become something more with the right innovative angle. Indeed, capitalists can be said to be the purest of the Animists. This said, industrial capital depends on and, along with states, vigorously polices the separations between forms of existence so that certain kinds of existents can be subjected to different kinds of extractions. Thus even as activists and academics level the relation between animal life and among objects (including human subjects), states pass legislation both protecting the rights of businesses and corporations to use animals and lands and criminalizing tactics of ecological and environmental activism. In other words, like the Virus that takes advantage but is not ultimately wedded to the difference between Life and Nonlife, Capital views all modes of existence as if they were vital and demands that not all modes of existence are the same from the point of view of extraction of value.

×

*This text is excerpted from the first chapter of Geontologies: A Requiem to Late Liberalism by Elizabeth A. Povinelli. Copyright Duke University Press, 2016.*

09/11

e-flux journal #81 — april 2017 Elizabeth A. Povinelli  
Geontologies: The Concept and Its Territories

Elizabeth A. Povinelli is Franz Boas Professor of Anthropology and Gender Studies at Columbia University. Her books include *Geontologies: A Requiem to Late Liberalism* (2016); *Economies of Abandonment: Social Belonging and Endurance in Late Liberalism* (2011), and *The Cunning of Recognition: Indigenous Alterities and the Making of Australian Multiculturalism* (2002). She is also a founding member of the Karrabing Film Collective.

10/11

e-flux journal #81 — april 2017 Elizabeth A. Povinelli  
**Geontologies: The Concept and Its Territories**

1  
This text is continued from  
“*Geontologies: The Figures and the Tactics*”

2  
Hannah Arendt, “The Conquest of Space and the Stature of Man,” *New Atlantis*, vol. 18, no. 43 (1963): 43–55; James Lovelock, “A Physical Basis for Life Detection Experiments,” *Nature*, vol. 207, no. 7 (1965): 568–70. See also Elizabeth DeLoughrey, “Satellite Planetaryity and the Ends of the Earth,” *Public Culture*, vol. 26, no. 2 (2014): 257–80.

3  
For some perspectives on the deep entanglements of knowledge, capital, and biological processes that occurred on account of the discovery of these fossils and fossil fuels, see Karen Pinkus, “Humans and Fuels, Bios and Zoe,” in *A Cultural History of Climate Change*, eds. Tom Ford and Tom Bristow (London: Routledge, 2016); and Kathryn Yusoff, “Geologic Life: Prehistory, Climate, Futures in the Anthropocene,” *Environment and Planning D: Society and Space*, vol. 31, no. 5 (2013): 779–95.

4  
Jason W. Moore, “The Capitalocene, Part 1” [http://www.jasonwmoore.com/uploads/The\\_Capitalocene\\_\\_Part\\_1\\_\\_June\\_2014.pdf](http://www.jasonwmoore.com/uploads/The_Capitalocene__Part_1__June_2014.pdf).

5  
Joel Achenbach, “Welcome to the Anthropocene,” *Washington Post*, August 3, 2010, reporting on a talk at the Aspen Environment Forum, given by Dennis Dimick, *National Geographic* <http://www.washingtonpost.com/wp-dyn/content/article/2010/08/02/AR2010080203751.html>.

6  
Simon L. Lewis and Mark A. Maslin, “Defining the Anthropocene,” *Nature* 519 (2015): 171–80.

7  
Ibid.

8  
Yusoff, “Geological Subjects.”

9  
For some examples of the slow shift from human to nonhuman to nonlife, see Donna Haraway, *Crystals, Fabrics, and Fields: Metaphors of Organicism in Twentieth-Century Developmental Biology* (New Haven, CT: Yale University Press, 1976); Dipesh Chakrabarty, “The Climate of History: Four Theses,” *Critical Inquiry* 35 (2009): 197–222; Claire Colebrook, *Death of the PostHuman: Essays on Extinction, Vol. 1* (Open Humanities Press, 2014); Tom Cohen, “Introduction,” in *Telemorphosis: Theory in the Era of Climate Change*, ed. Tom Cohen (Open Humanities Press,

2012), 13–42; *The Nonhuman Turn*, ed. Richard Grusin (Minneapolis: University of Minnesota Press, 2015); and Eugene Thacker, *After Life* (Chicago: University of Chicago Press, 2010).

10  
See, e.g., Knut Christian Myhre, “What the Beer Shows: Exploring Ritual and Ontology in Kilimanjaro,” *American Ethnologist*, vol. 42, no. 1 (2015): 97–115; Henrik Erdman Vigh and David Brehm Sausdal, “From Essence Back to Existence: Anthropology beyond the Ontological Turn,” *Anthropological Theory*, vol. 14, no. 1 (2014): 49–73; Martin Holbraad, “The Power of Powder: Multiplicity and Motion in the Divinatory Cosmology of Cuban Ifá (or Mana Again),” in *Thinking through Things: Theorising Artefacts Ethnographically*, eds. Amiria Henare and Martin Holbraad (London: Routledge, 2007), 189–225; Marisol de la Cadena, “Indigenous Cosmopolitics in the Andes: Conceptual Reflections beyond ‘Politics,’” *Cultural Anthropology*, vol. 25, no. 2 (2010): 334–70; and Philip Descola, *The Ecology of Others* (Chicago: Prickly Paradigm, 2013).

11  
I elaborate the above points in Povinelli, “The Will to Be Otherwise/The Effort of Endurance,” *South Atlantic Quarterly*, vol. 111, no. 3 (2012): 453–75.

12  
See, e.g., M. J. Hird, S. Loughheed, K. Rowe, and C. Kuyvenhoven, “Making Waste Management Public (or Falling Back to Sleep),” *Social Studies of Science*, vol. 44, no. 3 (2014): 441–65.

13  
John Carriero, “Conatus and Perfection in Spinoza,” *Midwest Studies in Philosophy* 35 (2011): 74.

14  
Brian Massumi, *Ontopower: War, Powers, and the State of Perception* (Durham: Duke University Press, 2016). See also Jane Bennett, “A Vitalist Stopover on the Way to a New Materialism,” in *New Materialisms: Ontology, Agency, and Politics*, eds. Diana H. Coole and Samantha Frost (Durham: Duke University Press, 2010), 47–69; Arun Saldanha, *Sexual Difference: Between Psychoanalysis and Vitalism* (London: Routledge, 2013); and Mel Chen, *Animacies: Biopolitics, Racial Mattering, and Queer Affect* (Durham: Duke University Press, 2012).

15  
For example, Elizabeth Grosz has recently sought to situate the concept of difference in the work of Charles Darwin and, more broadly, in the contemporary posthuman turn. Across a rich reading of the

writings of Darwin, Bergson, and Deleuze, Grosz evacuates the difference between Life and Nonlife, the organic and inorganic, by ascribing a “constrained dynamism” pulsing through both. She also differentiates the inorganic and organic by elevating one form of organic reproduction, sexual dimorphism, above all others on the basis of its complexity; it is uniquely “dynamic, open-ended, ontologically.” Elizabeth Grosz, *Becoming Undone: Darwinian Reflections on Life, Politics, and Art* (Durham: Duke University Press, 2011), 116.

16

Nafeez Ahmed, “Pentagon Bracing for Public Dissent over Climate and Energy Shocks,” *The Guardian*, June 14, 2013  
<http://www.theguardian.com/environment/earth-insight/2013/jun/14/climate-change-energy-shocks-nsa-prism>.

11/11

e-flux journal #81 — april 2017 Elizabeth A. Povinelli  
**Geontologies: The Concept and Its Territories**