TRANSATLANTICA

# Transatlantica

Revue d'études américaines. American Studies Journal

#### 1 | 2015 The Voting Rights Act at 50 / Hidden in Plain Sight: Deep Time and American Literature

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#### **Electronic version**

URL: http://journals.openedition.org/transatlantica/7362 DOI: 10.4000/transatlantica.7362 ISSN: 1765-2766

Publisher AFEA

#### Electronic reference

Cécile Roudeau, *"How the Earth Feels*: A Conversation with Dana Luciano", *Transatlantica* [Online], 1 | 2015, Online since 31 August 2015, connection on 29 April 2021. URL: http://journals.openedition.org/transatlantica/7362 ; DOI: https://doi.org/10.4000/transatlantica.7362

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# *How the Earth Feels*: A Conversation with Dana Luciano

Cécile Roudeau

## AUTHOR'S NOTE

Dana Luciano is Associate Professor of English and a former Director of the Women's and Gender Studies Program at Georgetown University, where she teaches sexuality and gender studies, 19th century US literatures, feminist theory, and queer film. For 2014-15, Luciano is the David R. Atkinson Center for a Sustainable Future Fellow at Cornell University's Society for the Humanities.

Luciano is the author of *Arranging Grief: Sacred Time and the Body in Nineteenth-Century America* (NYU Press, 2007). Her edited volumes include "Queer Inhumanisms," a special issue of *GLQ: The Journal of Gay and Lesbian Studies*, co-edited with Mel Y. Chen (vol. 22 no. 2-3, spring/summer 2015) and *Unsettled States: Nineteenth-Century American Literary Studies* (NYU Press, 2014), co-edited with Ivy G. Wilson.

Cécile Roudeau: The starting point of *How the Earth Feels*, your new book project, provocatively appeals to the sensory, cognitive and agential capacities of the earth's inorganic elements and proposes to gauge the emotional, corporeal and intellectual impact of this assumption on us, humans.<sup>1</sup> One dimension of your project will intersect with the notion of "deep time" insofar as it considers how the agency of rocks, earth, water, may recast our beliefs in human agency across time. Could you tell us about the genealogy of your project, and how you envision the place of literary texts within it?

Dana Luciano: My current project began by accident. I was working on a project that I then understood as being about ghosts and desire. I was committed to thinking about the spectral both as object and as method, performing the kind of contrapuntal reading that Avery Gordon and Jacques Derrida elucidate as proper to the ghostly.<sup>2</sup> But the ghosts kept throwing rocks at me. By which I mean, several of the texts I was considering devoted a remarkable amount of attention to the timespan indexed by rocks that appeared within them, dwelling on the distances that the rocks had traveled, the information they conveyed about prehistoric worlds. And finally I

understood that rocks had something to say about desire and memory and time as well—both that they materialized time in a compelling way, and that the depths of time they brought into the present were a particularly charged matter in the nineteenth century, when geological theories about the earth's "high antiquity" were still new.

Literary works may seem like an odd place to look for geology, but they are connected in more than one way. The foundations of geology—its explorations into near-inconceivable depths of time, its focus on the agency of nonliving matter—opened new avenues to the imagination. Nineteenth-century geology textbooks and articles in the popular press stressed terms like "wonderful" and "remarkable" when talking about geological discoveries. But this wasn't just a popularizing tactic; as Noah Heringman has shown, "wonder" was part of geological method for scientists in the post-Huttonian period.<sup>3</sup> Geologists also referred to their work in literary terms—what James Hutton (the Scottish geologist usually credited with the "discovery" of deep time, though his claim to that title is not unchallenged) called "reading in the face of rocks the annals of a former world."<sup>4</sup>

In this sense, it may be misleading to speak about "literature" as a separate category from geological or scientific writing. And in any case, I am less interested in making a case about "literature" than in the diffuse stylistic patterns that index something we might call affective geology. "Affective geology" can be found in work by scientists as well as laypersons, literary writers and journalists, and in the visual imaginary as well. It is not opposed to geological fact or theory; it amounts to an enlivening of those facts and theories, a turning of the necessarily speculative work of geology into a form of aesthetic and sensory experience.

C.R.: Considering this response and the conspicuous use of the verb "to feel" in the working title of your book, how might we understand the relationship between the sensory and the analytic?

D.L.: I'm trying to point out, first, that the sensory has always played a part in the analytic, and second, that our languages for how that works need to be enlarged and refined. The critical move away from the human demands an anthro-decentric rethinking of the sensory, a revision of the divisions among the senses and of modern sensory hierarchies. Sensing in geological time places different pressures on how one thinks about what can be felt in the body. Consider the longstanding habit of geologists to speak of deep time in terms of bodily sensation. One of the sites that James Hutton used to theorize the earth's antiquity was a lithic unconformity at Siccar Point in Scotland: two conjoined rock formations dating, respectively, from the Silurian and Devonian eras. The unconformity manifested, for Hutton, a vast span of missing time-over 50 million years-that definitively disallowed the 6000-year Biblical timespan within which many earth scientists were still attempting to operate. Deep time is "seen" here precisely in what can't be seen, through a gap in the rock record. Attempting to come to terms with that non-visibility could also cause a cognitive dissonance that was experienced as bodily sensation. This is clear in the oft-cited description, by Hutton's contemporary John Playfair, of the impact of viewing the Siccar formation. Playfair stresses that the rocks offer "palpable evidence" to confirm Hutton's theories, yet the familiar sensory terms that open the description soon give way to a sense of dizziness caused by the feeling of lurching back and forth across deep time: "We felt ourselves necessarily carried back to the

time when the schistus on which we stood was yet at the bottom of the sea....The mind seemed to grow giddy by looking so far into the abyss of time....[W]e became sensible how much farther reason can sometimes go than imagination can venture to follow."<sup>5</sup> Two centuries later, Stephen Jay Gould can be found still feeling it: "[a]n abstract, intellectual understanding of deep time comes easily enough.... Getting it into the gut is another matter."<sup>6</sup> Over two centuries, geologists have become fairly adept at translating the accounts in the "rock record," but they still seem to have significant affective and corporeal impact.

Gould, writing in 1987, argued that early geologists tried to negotiate this gap through metaphor, a line of argument expanded by subsequent scholarship in literary studies focusing on the aesthetic, literary or performative dimension of nineteenth-century geological writing and illustration. New materialists, though, might interpret Gould's claim more literally as they try to elaborate a means of making deep time sensible, of articulating transmaterial and transcorporeal connections against the fiction of the bounded subject.<sup>7</sup>

Now, I find this promise of sensory expansion intriguing, but again, that doesn't mean I necessarily place it "above" analysis, or even that I see them as two different projects. Nor would I see it as necessarily "new." Sensual thinking, embodied cognition, has long been central to feminist and queer critical thought. Consider, for instance, Audre Lorde's description, in "The Uses of the Erotic: The Erotic As Power," of how women might attend to what sensual pleasure has to teach. I've always been intrigued by one formulation in that essay, when she speaks of "the considered phrase, 'it feels right to me'" as the foundation of all understanding. I don't read this invocation of "feeling right" as about sentimentality or some kind of mystified intuition, but something closer to corporeal cognition, where the intellect is neither dismissed nor disembodied. She notes specifically that this is not possible within "an exclusively European-American male tradition," which I take to mean the form of rationalism that dismisses emotion and sensation as legitimate sources of knowledge.

C.R.: One form of rational hegemony is the abstract, empty and homogeneous time of the measuring tape, of the nation, which is as unable to accommodate the geological gaps "seen" and felt by Hutton as it is immune to any sort of sensory knowledge. Is "affective geology" your answer to the turn away from the time of the nation and the clock? How do you articulate your project (if you do) with Wai Chee Dimock's call for reading American Literature "across deep time" and outside the national(ist) chronology<sup>9</sup>?

D.L.: Affective geology sponsored all kinds of experiments in thought and feeling. Sometimes, these sought to move beyond humanist frameworks and to imagine trans-material forms of agency, sexuality, and relatedness—to posit what Wai Chee Dimock calls a "deep time' in human terms" or else to move beyond the human entirely, to think about animate matter as an enlivening, even an erotic, force.<sup>10</sup> Yet many of those experiments didn't have such liberatory promise—at least, not universally. Deep time can easily be turned into a national resource; it feeds American exceptionalism, provides a scientific basis for the "sacred time" of national origin.<sup>11</sup> Geology is also an important early site for what Foucault calls biopower: it readily lends itself to white-supremacist and settler-colonial projects.

One of my goals in this project, then, is to try to think about how to think about the directions taken by affective geology without simply parsing them into two

categories. It strikes me that there's a parallel here with the ways queer scholars in the US academy have taken up the work of Foucault since volume one of the History of Sexuality: close attention, on the one hand, to the speculative possibilities encoded in the oblique phrase "bodies and pleasures" and on the other, to the regulatory mechanisms of biopolitical regimes. This seems to be what Foucault is getting at in "What is Enlightenment?" when he speaks of "a philosophical life in which the critique of what we are is at one and the same time the historical analysis of the limits that are imposed on us and an experiment with the possibility of going beyond them."<sup>12</sup> The problem comes when we make these into separate projects or alternatives-leading to the kind of reading that Eve Kosofsky Sedgwick parodied as "kinda subversive, kinda hegemonic,"<sup>13</sup> or else, as I think is happening in many areas today, to the cordoning-off of the "historical analysis of limits" as the form of "bad" critique-paranoid, suspicious, symptomatic-that we are now supposed to be moving past. I'm not entirely on board with this critique of "critique"; for one thing, it relies too much on straw men, exaggeration, conflation, hyperbole. I'm compelled, though, by the emphasis on contact in many of the critical formulations that seek to replace it -not only by literary critics' insistence on remaining close to texts, but more generally, the insistence on renewing critical contact with the material world. It's not surprising, coming at a moment when the ability of humans to remain in contact with that world for much longer is in question (though that was also true, as Foucault noted, of the time in which he wrote). And I do think that contact might activate new thinking, new possibilities. But the "limits" also remain materially present, imposed upon bodies as well as landscapes, and this isn't a time to abandon critical contact with them.

C. R.: Let us remain close to texts, then, as you suggest. Literary texts are fond of homologies and analogies. Metaphor is a potent tool for creating interpretive connections. For example, "convulsion," the title of your second chapter, is a term used by Walt Whitman in his *Memoranda During the War* to describe the US Civil War—a war that he also describes as being a "volcanic upheaval" and an "earthquake."<sup>14</sup> He thereby reinvests the Puritan tradition of the jeremiad; but more to the point, one may argue he is doing the sort of "geological work" that you are mentioning in your book—binding the social-political and the geological, and tying together the corporeal and the geological. The work of metaphorization, in that sense, may be regarded as one of the contact zones that could activate "new thinking, new possibilities" in addition to help us grasp what cannot be grasped otherwise (as you mentioned Gould said a propos Hutton). To what extent does the metaphorical play a part in your work on "affective geology"?

D.L.: Well, geological metaphors like eruption and convulsion abound in nineteenthcentury writing, in part because of their dramatic potential. But they are also drawing on the layers of social meaning that have sedimented around these types of geological event. The depiction of slavery as a volcano that would eventually inevitably erupt became a common one in the antebellum period; Frederick Douglass used it in an 1849 speech, declaring "The slaveholders are sleeping on slumbering volcanoes, if they did but know it."<sup>15</sup> The metaphor worked so well, in part, because of the mythic association of volcanoes as retribution for sinfulness—as in the stories that clustered around the eruption of Vesuvius that buried Pompeii. In an 1859 speech commemorating John Brown, the Reverend J. Sella Martin cited a theory of volcanic eruptions then common among slaves: "It is thought by the slaves [...] that the meteors from the heavens are sparks that escape from the storehouse of the lightnings to strike upon the craters of volcanoes, and that is the cause of their eruption." For Martin, this becomes a "beautiful conceit" that synthesizes the geological, the political and the moral; John Brown's martyrdom becomes one such meteor, falling upon the "volcano of American sympathies," eventually to erupt in revolution.<sup>16</sup>

A homology, the tracing back of two resemblances to a common root, is another matter. By this I mean to point, again, to the way that what we understand as biopolitics is also rooted in the geological. As Jasbir K. Puar and others have argued, in modern bio-political regimes the bios in question is not necessarily contained by the borders of the human body, or even the notion of aliveness as we know it.<sup>17</sup> Biopolitics, that is, is not only about whose life counts enough to be fostered or maximized, but also fundamentally about what counts as life, and what kinds of "nonlife" it is counted against. Hence the quite literally foundational activity, even vitality, of rock and water and wind become crucial, both as formative to "life" as structured by power and as sites for thinking possible shifts in those structures.

What I'm trying to track under the sign of "affective geology" toggles between analogy and homology, or between the metaphorical and the material. I'm interested, for instance, in the kinds of accounts that cluster around earthquakes. The trope of the earthquake cracking open minds as well as landscapes, making room for new impressions and ideas, is a common one. Charles Darwin's diary entry, recording his experience of a major earthquake while doing research at Valdivia in February 1835, tells a version of this story. He observes that "[a]n earthquake like this at once destroys the oldest associations; the world, the very emblem of all that is solid, moves beneath our feet like a crust over a fluid; one second of time conveys to the mind a strange idea of insecurity, which hours of reflection would never create."<sup>18</sup> All that is solid melts into magma. In Darwin's case, the earthquake helped make him the thinker he became. It inspired his early publications in the field of geology, which speculated in the direction of what is now understood as plate tectonics. And his geological research, guided by the still-new understanding of the geological timescale and by Lyell's uniformitarianism, were, of course, the foundation for his later thinking on evolution. By shaking up the old, the earthquake makes room for the new.

Or we might consider, instead, how the geological intersects with the social in the case of the New Madrid earthquakes of 1811-12. These were the impetus for the first Federal disaster relief act—they set the script for the national response to natural disaster. But they also generated a number of competing local accounts of their cause and meaning. Tecumseh was said to have used the quakes as a recruiting tool for his pan-tribal federation, arguing that they were a manifestation of retribution on white settlers. Among those settlers, Christian revivalists of varying denominations read the earthquakes as divine judgment and urged conversion. So these differing accounts of the quakes as caused, in some way, by human behavior emerged alongside official "geological" accounts—and these accounts impacted people's post-quake behavior as much as the physical devastation of the quakes.<sup>19</sup> Earthquakes are metaphors, then, and potent ones, and they are also actors, changing the direction of human history or giving impetus to radical transformation.

Now, my choice of catastrophic geological events here makes this toggling a bit obvious: earthquakes and other "natural disasters" are also always social events,

whether or not they begin that way: their causes are located in geological time, but as events, they are experienced within a human timeframe. I'm also interested, though, in how we register other kinds of geological events, events that take place in deep time, not necessarily visible from the perspective of human time though they are also bound up with it. So for instance, fossilization: what kinds of time does the lithified presence of a trace of the geological past open to view? In Manuel de Landa's A Thousand Years of Non-Linear History, the fossil becomes a figure for the evolutionary continuity between flesh and stone, a way that bodies remember their planetary, mineral origins by "cross[ing] the threshold back into the world of rocks."<sup>20</sup> We see this kind of speculative thinking, this crossing of forms and times, in nineteenthcentury writing about fossils as well. I'm particularly interested, as a case study, in writings inspired by the discovery, in the mid-1830s, of numerous fossilized footprints in the Connecticut Valley, which were cited by number of writers, scientific and non-, including Edward Hitchcock, Henry Wadsworth Longfellow, Herman Melville and Oliver Wendell Holmes. The prints became a place where prehistory pressed forward into the present, bringing forth other perspectives meant to challenge anthropocentrism, as in Edward Hitchcock's poem about the prints<sup>21</sup>; or they could mark the site of an imminent disappearance from the present, as in one of Longfellow's allusions to the prints, where they foreshadow the so-called "vanishing" of Native Americans<sup>22</sup>. The prints' popularity says a lot about the appeal of geological thought in this period, an appeal that went well beyond the science's pragmatic uses to enfold deep time in speculative ways. In 1834, geology was described as the "fashionable science" in the pages of the Knickerbocker, or New-York Magazine.23 Geology's revelation of past worlds was touted as a source of fascination greater than anything humans had managed to produce. At the same time, writers sought persistently to place human time within geological time, to make connections across timescales, to use the geological past to think about the historical present and future.

C.R.: Granted. Such literature was not necessarily a way out of historical time and out of the human. It could be a mere detour, which in the worst cases brought their readers back to an anthropocentric grasp on time and which at best could also take part, if obliquely, in the political. What I mean is that some fictions of deep time, because they allow us to imaginatively see the world from a non-human perspective, or rather from a perspective that undoes the dichotomy human/non-human, are entitled to a political agency of their own. Building on Jacques Rancière's statement that literature does politics as politics because it intervenes in the distribution of the sensible, one might propose that literature, because it is also, and more to the point maybe, an agent of the *non*-partition, a privileged site where the "non-discreteness" of the world is made palpable—has a part to play in recovering the continuum of matter, an inorganic yet vibrant continuum.<sup>24</sup>

D.L.: I have to confess I've never been that invested in the category of "literature" as such. It opens onto a history of disciplinary and/or hierarchical distinctions that I find too distracting and retrogressive. I know this is not what Rancière means when he talks about "literature as literature"—literature as an opening to the "disorder of literariness." Still, the canonical status of his examples tends to work against the radical reopening of the category that he proposes. You're right to observe that the stakes of this project devolve, in part, on the way that geology sponsors and infests forms of writing that operate as potential interventions into the distribution of the sensible. Rancière points to Balzac's description of geology as poetry—he called Cuvier "the greatest poet of our century," in that he used objects to reawaken entire worlds. Indeed, nineteenth-century writers—geological and otherwise—were

fascinated by this potential, by the way geology both demanded and gave concrete form to the dedicated work of the imagination. But my location of these instances primarily in literary texts (and, in later chapters, in visual texts, especially photographs) responds more to my disciplinary training and location than to a privileged definition of "literature."

I'm also a bit wary of positioning this kind of intervention as a process of recovery, insofar as that framing too easily gives way to depictions of the quest to locate something different than what we understand the present to be, as a search for something earlier, something prior to our own "fallen" world. What that does is effectively convert a perceptual division-what we can see or hear or grasp-into a spatiotemporal one. "Before" in this sense presents us with the lure of the pristine, untainted world, an artifact of theology rather than geology, although the latter is not immune to the logic of the former. It may seem like common sense to divide the prehuman/geological world from the human/historical one, but that's precisely the gesture that contemporary earth systems scientists warn against-in, for example, the push to adopt "Anthropocene" as the name of the geohistorical present, which would mark a way of thinking of ourselves as living in deep time.<sup>25</sup> I'd say this is true in general, not just as a polemical intervention into the contemporary crisis. The world of the dinosaurs, for instance, isn't gone. Sure, they don't exist as life forms any more, but that doesn't mean that they aren't present in our own world, materially as well as conceptually. So "recovering," in your terms, the continuum of matter doesn't make as much sense to me as trying to actualize it otherwise.

C.R.: In the end, would you describe your coming book as a contribution to a new materialism? And if so, is your project a way to "expand and enliven", to take up what seems to me two pivotal verbs and notions in your work, the old materialisms, instead of relegating them to the past and simply burying them or recovering them?

D.L.: The most compelling contribution of the new materialisms is not conceptual or analytic, strictly speaking, but sensory. The attempt to attend to the force of liveliness of matter will entail not just a reawakening or redirection of critical attention, but a reorganizing of the senses, departing from the limitations of the Aristotelian model. Against the alleged sensory deadening of an anthropocentric and linguistically-focused criticism, the geological or geo-affective turn might help to launch an effort to learn to think less of ourselves as we learn to sense more of the world. In re/awakening criticism to alternate sensory dimensions, it holds the potential to expand and enliven—though crucially, not to replace—"old" (historical) materialisms.

But in terms of the political force of a renewed attention to matter: I'm a bit up in the air about that one. In the conversations around the new materialisms, for instance, we hear of the necessity of giving materiality its "due," of recognizing the force of the nonhuman, of respecting the agency of things, but all of these formulations risk sliding into subject-centered ethical and political models even as theorists work actively to undo those. A case in point is Jane Bennett's attempt to invoke Ranciere as a means of thinking through the political implications of her account of "vibrant matter." Her invocation of new materialism as an intervention into the "distribution of the sensible" is compelling. Yet the chapter closes on an analogy made by Bruno Latour that aligns the "radical" political promise, the disruptive impact of this thinking, with liberal inclusion: he questions why philosophers confine their efforts

to imagine the good life as "for humans only without the nonhumans that make them up," predicting that it will someday be considered "as extravagant as when the Founding Fathers denied slaves and women the vote."<sup>26</sup> Even as Latour points out that the nonhuman is not other than or apart from the human, he stages a comparison to a political model in which populations are successively enfolded into the liberal public sphere.

Part of the issue, I think, is the paucity of extant models of human collectivity in much new materialist and ANT influenced thought. There's an almost reflexive distancing of Marxism in some of this work, for instance-though it's often some kind of generic, watered-down version that would be unrecognizable to Marxist theorists. <sup>27</sup> Or else there's a reproduction of the kind of analysis that historical materialism performs under the sign of the "new." I'm thinking of Jussi Parikka's recent proposal for a "geology of media" in his beautifully-titled short study The Anthrobscene. Parikka uses the geological as a launching point for a "deep history" of media, one that leads to a demand for media theorists to develop stronger ecological awareness. As an example, he tracks the noxious circuits of electronic waste, beginning with the extraction of rare and toxic mineral resources from the earth by undercompensated laborers in order to build smartphones and computers that are ever-more-speedily consumed and, after their rapid-onset obsolescence, "recycled," which is to say dumped, in the global South where they leach toxic chemicals into the soil and water, poisoning nearby populations. This leads him to close his proposals for a "new materialist media studies" by asserting that media scholars need to develop a theory of labor, effectively circling back around to "old" or historical materialism without ever quite acknowledging it.<sup>28</sup> Now, I admire this analysis but I don't see it as differing from environmentally-attentive historical materialism, or from the kind of thinking environmental-justice thinkers and activists have been working with for decades. So while there's an attractiveness to thinking in deep time, I don't think we need the whole geological timescale to make the kinds of environmental damage that Rob Nixon gathers under the sign of "slow violence" sufficiently legible.<sup>29</sup> In this sense, while I think critical attention to the geological may operate as a provocative enrichment to and expansion of materialist thought-something, incidentally, that Marx also believed-there are also times when it serves as a diversion, a kind of mystification or invitation to awe. Parikka's claim that we have a "deep time of the planet" inside our computers and smartphones, for instance, is neat, but it's the places those minerals now travel (and the volumes and speeds of that circulation) that pose the problem. As Jason Moore puts it, the "call for the relationality of humanity-in-nature does not deny the materiality of resources."30 So it isn't clear to me where a distinction between the "deep time" associated with minerals and the historical time of their incorporation into these circuits would take us.

Another political concern is that while a lot of new materialist work operates, increasingly, under the sign of environmental crisis, trying to conceptualize a global problem with recourse only to thinkers is bound to fail. As Zakiyyah Iman Jackson points out, self-identified "post-humanist" theory rarely takes up the critiques of the "human" launched by decolonial and antiracist thinkers, despite their attention to histories of dehumanization, of the reduction of bodies to matter.<sup>31</sup> The question of how to see the world from a perspective other than the human, that is, needs a closer alignment with the gaze of the dehumanized. There's also been a general omission of

indigenous thought, even though, as Kim TallBear observes, this body of work starts from another position: it does not need to remember or "recover" nonhuman agency insofar as "indigenous peoples have never forgotten that nonhumans are agential beings engaged in social relations that profoundly shape human lives."<sup>32</sup> These perspectives demonstrate that legacies of environmental degradation and damage cannot be separated from histories of intra-human violence and exploitation, that deep time can't be thought apart from historical time without risking the erasure, once again, of those histories. And it is for that reason, I think, that they offer more in the way of developing a politics borne of a renewed or intensified attention to the

more-than-human or material world than another return to Heidegger or Spinoza.

### NOTES

**1.** The full working title of the book reads: *How the Earth Feel: Geological Fantasy in the Nineteenth-Century US.* 

**2.** Avery Gordon, *Ghostly Matters: Haunting and the Sociological Imagination, Minneapolis, University* of Minnesota Press, 2008; Jacques Derrida, *Specters of Marx: The State of the Debt, the Work of Mourning, and the New International,* New York, Routledge, 1994.

3. Noah Heringman, Romantic Rocks, Aesthetic Geology, Ithaca (NY), Cornell University Press, 2004.

**4.** James Hutton, *Theory of the Earth, with Proofs and Illustrations. In Four Parts,* Volume III, ed. Archibald Geike, London, Geological Society, 1899, 46.

**5.** James Hutton, "Biographical Account of the Late Dr. James Hutton," quoted in Dennis R. Dean, *James Hutton and the History of Geology*, Ithaca (NY), Cornell University Press, 1992, 122.

6. Stephen Jay Gould, *Time Arrow, Time's Cycle*, Cambridge (MA), Harvard University Press, 1988, 3.
7. Elizabeth Ellsworth and Jamie Kruse, eds. *Making the Geologic Now: Responses to Material Conditions of Everyday Life*, New York, Punctum Books, 2013.

**8.** Audre Lorde, "The Uses of the Erotic: The Erotic as Power," in *Sister/Outsider: Essays and Speeches*, Crossing River Press, 2007, 56; 59.

**9.** Wai Chee Dimock, *Through Other Continents: American Literature Across Deep Time*, Princeton, Princeton University Press, 2006.

**10.** Dimock, *Through Other Continents, op. cit.*, 6. I have written specifically about the erotics of geology in "Geological Fantasies, Haunting Anachronies: Eros, Time, and History in Harriet Prescott Spofford's 'The Amber Gods,'" *ESQ: A Journal of the American Renaissance*, vol. 55, n° 3-4, Special Issue, "Come Again?" (December 2009), 269-303.

**11.** Thomas Allen discusses the alignment of geology and American exceptionalism in *A Republic in Time: Temporality and Social Imagination in Nineteenth-Century America* Durham (NC), University of North Carolina Press, 2008. I have explored the status of "sacred time" in ostensibly secular contexts in *Arranging Grief: Sacred Time and the Body in Nineteenth-Century America*, New York, NYU Press, 2007.

**12.** Michel Foucault, "What is Enlightenment?" in *The Foucault Reader*, ed. Paul Rabinow, New York, Pantheon, 1984, 50.

**13.** Eve Kosofsky Sedgwick, "Queer Performativity: Henry James's *The Art of the Novel*," *GLQ*, vol. 1, n° 1 (1993), 1-16, here 15.

14. Walt Whitman, Memoranda during the War, Camden (NJ), 1875-76, 65; 60.

**15.** Frederick Douglass, "Slavery, The Slumbering Volcano," 1849, quoted in Maggie Montesino Sales, *The Slumbering Volcano: American Slave Ships and the Production of Rebellious Masculinity,* Durham, Duke University Press, 1997.

**16.** J. Sella Martin, "Speech at Fremont Temple, December 2, 1859" in John Stauffer and Zoe Todd, eds., *The Tribunal: Responses to John Brown and the Harper's Ferry Raid*, Cambridge (MA), Harvard University Press, 2012, 160.

**17.** As Jasbir K. Puar explains, "...societies of control tweak and modulate bodies as matter, not predominantly through signification or identity interpellation but rather through affective capacities and tendencies." Puar, "I Would Rather Be a Cyborg Than a Goddess': Becoming-Intersectional in Assemblage Theory," *philoSOPHIA*, vol. 22, n° 1 (Spring 2012), 63.

**18.** Charles Darwin, *Charles Darwin's Beagle Diary*, ed. R.D. Keynes, Cambridge, Cambridge University Press, 1988, 292.

**19.** I've written about this event in Luciano, "Introduction: On Moving Ground" in *Unsettled States: Nineteenth-Century American Literary Studies*, co-edited with Ivy G. Wilson, New York, NYU Press, 2014.

20. Manuel De Landa, A Thousand Years of Nonlinear History, Cambridge (MA), MIT Press, 2000, 27.

**21.** "Poetaster" [pseudonym for Edward Hitchcock], "Ornithichnites Giganteus, Redevivus," *The Knickerbocker*, vol. 8 (December 1836), 750-52.

**22.** Henry Wadsworth Longfellow, "To the Driving Cloud," in *The Belfry of Bruges and Other Poems*, London, H. G. Clarke and Co., 1845.

**23.** *Knickerbocker, or New-York Magazine;* quoted in Rebecca Bedell, *The Anatomy of Nature: Geology and American Landscape Painting,* 1825-75, Princeton, Princeton University Press, 2002, 3.

**24.** "Politics is first of all a way of framing, among sensory data, a specific sphere of experience. It is a partition of the sensible, of the visible and the sayable, which allows (or does not allow) some specific data to appear; which allows or does not allow some specific subjects to designate them and speak about them. It is a specific intertwining of ways of being, ways of doing and ways of speaking. The politics of literature thus means that literature as literature is involved in this partition of the visible and the sayable, in this intertwining of being, doing and saying that frames a polemical common world." (J. Rancière, "The Politics of Literature," *SubStance*, vol. 33, n° 1, issue 103: Contemporary Thinker Jacques Rancière (2004), 10-24, here 10).

**25.** I have written on the debates over the Anthropocene concept in "The Inhuman Anthropocene," *Avidly*, March 22, 2015; http://avidly.lareviewofbooks.org/2015/03/22/the-inhuman-anthropocene/.

**26.** Bruno Latour, *Pandora's Hope*, 297; quoted in Jane Bennett, *Vibrant Matter: A Political Ecology of Things*, Durham, Duke University Press, 2010, 109.

27. See, for instance, Reza Negarestani's extended calling-out of something he names "kitsch Marxism" in "The Labor of the Inhuman, Part 1: Human," e-flux #52 (February 2014). Online at http://www.e-flux.com/journal/the-labor-of-the-inhuman-part-i-human/. Accessed April 23, 2015. See also Christopher Nealon's critique of the frequency and banality of this move: "Infinity for Marxists," Mediations vol. 28 no. 2 (spring 2015). Online at http://www.mediationsjournal.org/articles/infinity-for-marxists#end\_7. Accessed April 23, 2015.

28. Jussi Parikka, The Anthrobscene, Minneapolis, University of Minnesota Press, 2015.

**29.** Rob Nixon, Slow Violence and the Environmentalism of the Poor, Cambridge (MA), Harvard University Press, 2013.

**30.** Jason W. Moore, "The Capitalocene, Part I: On the Nature & Origins of Our Ecological Crisis," http://www.jasonwmoore.com/uploads/The\_Capitalocene\_\_Part\_I\_\_June\_2014.pdf, 14.

**31.** Zakiyyah Iman Jackson, "Animal: New Directions in the Theorization of Race and Posthumanism," *Feminist Studies*, vol. 39, n° 3 (2013), 669-85.

**32.** Kim TallBear, "An Indigenous Reflection on Working Beyond the Human/Not Human," *GLQ*, special issue on Queer Inhumanisms, ed. Mel Y. Chen and Dana Luciano, vol. 21, n° 2-3 (June 2015), 230-35.

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