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Geology, Power, and the Planetary

Earth as Praxis

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Abstract What conditions of possibility have emerged for learning to live on a new earth? This special section builds on scholarship in the environmental humanities, critical Black studies, and geophilosophy to explore how emergent ways of becoming human are forged in relation to powerful earth dynamics, even while earth's powers are constitutive of contemporary forms of domination. Geologizing Sylvia Wynter's understanding of being human as a praxis, it proposes that earth as praxis (a) provides a diagnosis of the deeply embedded forms of power that have been materialized, over several centuries, in the earthly conditions of life itself; and (b) represents a critical potential for creating new ways to live on earth through the practical exploration of geosocial relations. We highlight three modes of earth praxis. *Inhuman territorializations* calls attention to the landscapes and earthy matter subjected to racializing and territorializing modes of power. In turn, such practices participate in the constitution of dehumanized, racialized, and dispossessed bodies and peoples. *Becoming geological* refers to the ways human forms of living have become shot through with earth system dynamics, mineralogical relations, and energetic possibilities, to the extent that people cannot be who they are without these pervasive anthropogenic geologies. Finally, *planetary predicaments* helps diagnose the politically vital and collective but deeply unequal and nonhomogeneous conditions of the present. Earth as praxis offers an analytical grip on emerging planetary earth relations that breaks with abstract, universalizing categories, and is capable of diagnosing the wide range of today's violent, creative, and liberatory planetary practices.

Keywords praxis, geology, planetary, Anthropocene, decolonization

Planetary Resonance

In February 2021, radioactive orange-pink clouds loomed over France and Spain and as far north as Germany, covering fields and roofs with a thin but pervasive layer of nuclear dust.¹ Originating in the Sahara Desert, the storm carried its sixty-year-old

1. Cereceda, "Irony as Sahara Dust Returns Radiation."

intercontinental payload across the Mediterranean from nuclear weapons tests conducted in the French-colonized Algerian desert at the height of the Algerian War. The radioactive dust was an archive of French colonialism and the violent territorialization of the earth. On February 13, 1960—a year before Frantz Fanon would pen *The Wretched of the Earth*, with its incisive class analysis of the limits and possibilities of anticolonial violence—France carried out the first of three above-ground atmospheric nuclear tests, code-named Gerboise Bleue (Blue Desert Rat, or jerboa), in the Algerian Sahara.² By 1966, another fourteen underground tests followed, exposing Algerians, Berbers, and stationed French soldiers to lethal levels of radiation that lurk in the desert to this day.³

Long after the detonations, radioactive waste still contaminates geopolitical bodies and subjectivities. Before France moved its testing to Polynesia, the military buried debris throughout the test areas in the Sahara Desert. These highly radioactive military dumps were progressively exposed by the Saharan winds and the metals were stripped for scrap. “From the abandoned nuclear testing bases, people have recovered plates, beams, electrical cables and equipment of all kinds, all of which is radioactive,” reported Larbi Benchiha, a journalist.⁴ “They have incorporated them into the construction of their homes.”⁵ Perhaps anywhere from twenty-seven thousand to sixty thousand people were affected by these tests. Yet in Europe, the swirling, transcontinental dust of 2021 was interpreted sharply within the conventional frame of risk politics, with experts taking the predictable role of reassuring the public that there was nothing to worry about. A *Euronews* article cast the situation as “Irony as Sahara Dust Returns Radiation of French Nuclear Tests in ’60s.”⁶ As European news and social media could not help but observe, the irony was simply the failed expectation that France’s colonial legacy would respect international borders.

What strikes us about these events is the conflicted materiality of their spatial and temporal resonance across continents, decades, centuries, and even millennia. Continental difference was central both to the testing location in France’s colonial “backyard”—much like that of the US testing on Indigenous lands in the Pacific and American Southwest—and to the rupture of that distance when the dust refused to stay put under certain atmospheric conditions.⁷ European anxiety as a cultural politics of risk and calls for responsibility toward the former colony must contend with the excessiveness of these material relations. A “politics of strata” binds the ungovernable volatility of an inhuman earth with the violently governed, enforced inhumanism of racial and class difference.⁸

2. Henia, “Oil, Gas, Dust.”

3. Panchasi, “Atomic ‘Adventure’ in Empire.”

4. Magdaleno, “Algerians Suffering from French Atomic Legacy.”

5. Magdaleno, “Algerians Suffering from French Atomic Legacy.”

6. Cereceda, “Irony as Sahara Dust Returns Radiation.”

7. See DeLoughrey, “Myth of Isolates”; Masco, *Nuclear Borderlands*; and Teaiwa, “Bikinis and Other S/Pacific N/Oceans.”

8. Clark, “Politics of Strata”; Wynter, “Unsettling the Coloniality”; Yusoff, “Inhumanities.”

If *geos* refers to earth itself, and not only to its mineral parts, then geological relations have become the domain of social theory.⁹ The critique of the geological not only captures the political stakes of fossil fuels but also contends with the creatively destructive power of volcanoes, the time-telling capacities of fossils, and the pull of other geological forces that are not immediately problematized in political terms.¹⁰ Yet geological relations also extend beyond the primacy of the ground, rock, or strata. Theorists of ocean systems have emphasized the creative appropriation of ocean and wind currents as critical to European conquest.¹¹ In the Arctic, the precipitous collapse of polar ice has provoked a substantial shift in geomilitary arrangements.¹² Extractive earth relations were essential to settler-colonial projects in North and South America, and they continue to define how settler states and their militarized resource empires engage with Indigenous peoples.¹³ Atmospheric, hydrological, geomorphological, tectonic, and even cryospheric dynamics have provoked a wide range of engagements that refuse to be defined by the terms of mainstream scientific knowledge and efforts to weaponize it alike.

Earth as praxis offers an analytical grip on emerging planetary earth relations that both breaks with abstract, universalizing tendencies toward the planetary and is capable of diagnosing or affirming the wide range of today's violent, creative, and liberatory planetary practices. "The planetary" has emerged as a powerful and perhaps all-encompassing problem across social and political inquiry, from comparative literature and postcolonial theory, to Anthropocene studies, to expansive discussions in anthropology and geography of climate, weather, and earth system management.¹⁴ Over more than a decade, Nigel Clark and Kathryn Yusoff have redefined the conversation around geosocial relations and the challenge that earth relations pose to social and political thought.¹⁵ Following Clark and Szerszynski's notion of planetary social thought, we emphasize earth's capacity to become radically different from itself and the radical plurality of ways people are constituted within these planetary forces.¹⁶ That plurality is constitutively bound to the appropriation of earth's powers in the material formation of contemporary domination. For Kathryn Yusoff, a plurality of Black Anthropocenes subtend "white geology," organized as a "stratum or seismic barrier to the costs of extraction, across the coal face, the alluvial planes, and the sugarcane fields, and on the slave block, into the black communities that buffer the petrochemical industries and hurricanes to the indigenous

9. See Oguz, "Introduction: Geological Anthropology."

10. Holmberg, "Sound of Sulfur"; Roosth, "Turning to Stone."

11. Duara, "Oceans as the Paradigm of History."

12. Whittington, "Fingerprint, Bellwether, Model Event."

13. Bonilla, "Coloniality of Disaster"; Estes, *Our History*; Gómez-Barris, *Extractive Zone*; Henry, "Extractive Fictions"; Lea, *Wild Policy*.

14. Among others see Arboleda, *Planetary Mine*; Chakrabarty, *Climate of History in a Planetary Age*; Mbembe, *Out of the Dark Night*; Spivak, *Death of Discipline*; Pratt, *Planetary Longings*; Gabrys, *Program Earth*; and Latour, *Down to Earth*.

15. Clark, *Inhuman Nature*; Clark and Yusoff, "Geosocial Formations."

16. Clark and Szerszynski, *Planetary Social Thought*.

reservations that soak up the waste of industrialization and the sociosexual effects of extraction cultures.”¹⁷

Formal and subjugated knowledges are very much at stake. Elizabeth Ferry, in her foreword to this collection, argues that sciences of the earth and the ability to appropriate its powers form a fourth flank to the trinity of colonization, the transatlantic slave trade, and capitalism in defining the terms of the present. Drawing on Michel-Rolph Trouillot, she calls this the “inorganic slot” to emphasize the role of formal and practical knowledge. Geography and geology are spatially organizing modes of knowledge that simultaneously expulse, fossilize, and dehumanize Black and Indigenous people, as Katherine McKittrick argues.¹⁸ Yet for McKittrick Black ecologies and geologies forge counter-cartographies of oceans, land, and people to disrupt such dehumanizing geospatial arrangements. Sylvia Wynter’s dynamic philosophy of praxis refuses any neat settlement between the natural and social worlds because, as McKittrick emphasizes, “the natural sciences (geologies, ecologies, and physiologies), human activity (origin stories) and psychic activity (emotionality) are not only entwined but emerging, simultaneously, as knotted knowledge systems that can read our planetary futures outside market time.”¹⁹ Against ongoing colonial legacies, Tiffany Lethabo King takes up the shoal as a register and metaphor of “liminal space between the sea and land,” making possible “convergence, gathering, reassembling, and coming together (or apart)” of Black and Indigenous histories.²⁰ And the shoal is not merely metaphor, when shifting mudbanks from Jakarta to Guyana serve to catapult Dutch colonial geoengineering into today’s climatic vulnerability.²¹

Earth as praxis repoliticizes the planet by exposing the violent processes through which it has come into being, metaphorically and materially, while providing nuanced tools for retheorizing what such geosocial formations have excluded, produced, and made possible.²² The planetary is not a uniform or fixed set of conditions but, rather, a condition of proliferating material formations of difference, including collective responsibility for and possibility within those differences. We build on Elizabeth Grosz’s exploration of the preindividual and impersonal force of the geologic as the precondition for the human and for life, complicating any clear distinction between life and inert matter.²³ Grosz’s feminist geophilosophy examines how the “forces of the earth itself” work prior to, through, and beyond life, constituting the dynamic conditions for material porosities, mutable forms, and constant change.²⁴ In our terms, life and humanity are not

17. Yusoff, *Billion Black Anthropocenes*, xii.

18. McKittrick, “Rift,” 244. See also Hosbey, Lloréns, and Roane, “Introduction: Global Black Ecologies”; Pulido and De Lara, “Reimagining ‘Justice’”; and Roane, “Black Ecologies.”

19. McKittrick, “Rift,” 265.

20. King, *Black Shoals*, 4.

21. See Vaughn, *Engineering Vulnerability*; and Goh, *Form and Flow*.

22. Clark and Yusoff, “Geosocial Formations.”

23. Bosworth, “Thinking Permeable”; Grosz, Yusoff, and Clark, “Interview.”

24. Grosz, Yusoff, and Clark, “Interview,” 135.

transcendental entities, but rather are outcomes of the ongoing emergence of earth's own capacities for existence. Conversely, contemporary forms of political and economic domination are not an addendum to the humanity of the Anthropocene, but rather are fully constitutive of the planetary formation itself. Thus, emergent geopolitical and geosocial formations are collective, deeply unequal, nonhomogeneous, and nonuniversal.

The planetary, then, is perhaps best not understood in holistic or all-encompassing terms, even while totalizing forms of earth systems science have become dominant and vital. For Jennifer Gabrys, who is primarily concerned with technological mediations of the planetary, "becoming planetary" involves an attention to questions of "colonial imaginations and control, of racial and economic exclusions, of environmental injustices, and of universal science and global abstractions that might be de-figured, superseded, and transformed in the search for more open and just ways of being human *and planetary* that are still to be re-imagined."²⁵ In that sense, planetarity is central to what Elizabeth Povinelli calls the four axioms of existence that cross the historicity of these forms of domination with the ontological entanglements of planetary existence, without requiring anything like a collectively experienced, singular planetary event.²⁶ However, the emphasis on praxis serves to insist that, whatever the considerable insights of critical theory, ultimately people's intimate and embodied relations with the earth will make possible human capacities for geosocial existence that can contend with the deeply unequal and far from homogeneous collective predicament faced today. Praxis is perhaps one condition of possibility for learning to live on a new earth.

Praxis as Possibility

Earth as praxis emerges most directly from Sylvia Wynter's radical humanist project that emphasizes the differentiating, plural, and nonessentialist modalities of being human as praxis.²⁷ Wynter draws this formulation from Fanon's criticism of the dehumanizing effects of the human sciences that objectified peoples as naturalistic objects, mere animals. Those sciences of colonial and racial governance are the ancestors of economic, behavioral, and normative psychosocial sciences today. Fanon showed the extent to which humanism as a universal project was terrified of the wretched of the earth.²⁸ By contrast, being human as a praxis invalidates both the transcendental human—in the figure of Man or Humanity—and its scientific, insect-like empirical counterparts, those real people whose plurality becomes the object of power through measurement and dissection. Wynter's radical humanism rests on a critique of "monohumanism," the imposition of a singular view of what it means to be human, inevitably with European overrepresentation of male whiteness as the very paradigm of humanity.²⁹ By contrast, the constant pluralizing efforts of being human bring into the foreground

25. Gabrys, "Becoming Planetary," n.p.; her emphasis.

26. Povinelli, *Between Gaia and Ground*.

27. Wynter and McKittrick, "Unparalleled Catastrophe"; Scott and Wynter, "Re-enchantment of Humanism."

28. Fanon, *Wretched of the Earth*.

29. Wynter and McKittrick, "Unparalleled Catastrophe," 66.

the whole domain of the symbolic without reference to an underlying universality. As McKittrick puts it, “We fictively auto-institute or pseudospeciate ourselves as hybridly human.”³⁰ Rather than deficient or exemplary versions of the same, we have the affirmation of real differences.

Into Wynter’s powerful vision of a politics of affirmative difference, earth as praxis builds the constitutive earthly powers as a renaturalization of the planet’s habitability.³¹ Forms of being human rely on, take advantage of, and ally themselves with the powers of the earth both for creative and emancipatory politics and through the dehumanizing politics of domination and expropriation. Earth as praxis demonstrates that the planetary emerges not as an abstract universal category newly available to thought but as the immanent outcome of a myriad material-discursive formations. For example, Alexis Pauline Gumbs’s recent twist on being ocean as praxis presents a species-unraveling encounter with slavery, climate change, and the challenge they pose to scientific and other narratives about what it means to be human.³² By stressing the dynamic, intensive, and situated engagements with earth processes and material formations, scholarship can help identify the far-reaching but open-ended potential for alternative futures.

By emphasizing this position, we part ways from current efforts to theorize the planetary human as a telos brought into being by collective calamity.³³ This position has no need for species-being self-recognition or the singularity of a defining political event.³⁴ Being human as a praxis enables a shift from nouns (planet, human, race, species, population) to verb-form processes that establish multiple genres of being humanly—and being earthly. Praxis thus requires and makes possible an ongoing commitment to collective learning and transformation.

A central aspect of praxis lends weight to a materialist theory of collective subjectivity and subjection, what Michelle Murphy has called “reading Foucault as a materialist.”³⁵ Yusoff argues that the “praxis of geology was used as an instrument of deformation in the possibilities of collective subjective and ecological life for black and brown communities,” stressing both the mode of subjection and the powers of “praxis for remaking other selves that were built in the harshest of conditions.”³⁶ This aspect is closest to Antonio Gramsci’s understanding of praxis as breaking open didactic and totalizing theories in favor of historically dynamic, nondeterministic, and materialist processes of collective subject formation.³⁷ Praxis thus has crucial diagnostic utility,

30. Wynter and McKittrick, “Unparalleled Catastrophe,” 25.

31. On renaturalization, see Saldanha, “Reontologising Race”; Sharp, *Spinoza*. See also Grosz, *Chaos, Territory, Art*; Yusoff et al., “Geopower”; Weheliye, *Habeas Viscus*.

32. Gumbs, “Being Ocean as Praxis.”

33. Chakrabarty, *Climate of History in a Planetary Age*; Balibar, *Citizen Subject*; Mbembe, *Out of the Dark Night*.

34. Povinelli, *Between Gaia and Ground*, referring to her third axiom.

35. Murphy, *Sick Building Syndrome*, 181.

36. Yusoff, *Billion Black Anthropocenes*, ii.

37. Femia, *Gramsci’s Political Thought*, 66–81.

even while it works to recuperate historical agency and provide a strategic orientation to action by emphasizing collectively powerful relations to the earth.

In Paolo Freire's *Pedagogy of the Oppressed*, praxis represents the possibility of learning and a rejection of dehumanizing social processes, much in the way Wynter's reading of Fanon is a rejection of dehumanizing discourses of the human sciences. It means putting ideals of liberation into practice and affirming their commitments, risked in an "act of love."³⁸ We consider this a redistribution of affects, such as Stephanie Wakefield's recent rejection of the disempowering crisis rhetoric of the Anthropocene.³⁹ Kasia Paprocki has documented a practice of anticipatory ruination in World Bank-led climate adaptation programs, which also depends on an affective distribution.⁴⁰ Against this we join numerous calls for a politics of viability in the renewed experimentation with distinctive ways of inhabiting the earth. We are not learning to die in the Anthropocene, as Roy Scranton has argued, but learning how to live on the earth, which requires, as Robin Wall Kimmerer teaches, new forms of attentive patience as much as the recuperation of historical agency.⁴¹ Praxis can thus be a synonym for learning if that is taken as ethically formative and engaged with conditions of collective viability and not as an extractive process of accumulation.

Our understanding of earth as praxis emphasizes three lines of engagement: *inhuman territorializations*, *becoming geological*, and *planetary predicaments*. Over the past several centuries, global social relations have become geological by being suffused with mineral and fossil energy relations, without which most people living today would not be who they are. This implies the need to be attentive to the *longue durée* formative processes that constitute the present. At the same time, powerful inhuman natures of the earth are undergoing a profound renaturalization as a function of a wide range of destabilizing anthropogenic forcings. The planetary predicament faced today is to figure out what forms of being human can fully consider what it means to inhabit an earth that is rapidly becoming unlike any world for which most of our collective systems have been built. In the rest of this introduction, we discuss these lines of engagement along with this special section's accompanying articles.

Inhuman Territorializations

Inhuman territorializations refers to the processes through which the earth has been subjected to modes of expropriative power and, in turn, how such practices participate in the constitution of dehumanized, racialized, dispossessed, or exhausted bodies and peoples. States, militaries, and security apparatuses have systematically sought to territorialize and weaponize powerful earth relations as tools of surveillance, occupation, or

38. Freire, *Pedagogy of the Oppressed*, 50.

39. Wakefield, *Anthropocene Back Loop*.

40. Paprocki, *Threatening Dystopias*.

41. Scranton, *Learning to Die*; Kimmerer, *Braiding Sweetgrass*, 48–50.

counterinsurgency. In occupied Palestine, for example, archaeological, hydrological, and subterranean knowledge have all been instrumental to Israeli claims of indigeneity and processes of state-making and territorialization.⁴² In Turkey's Kurdish-populated regions, limestone caves scattered throughout the Upper Tigris Valley have been central to the Turkish state's attempts to exert and secure territorial power, but also to the ways that Kurds in Turkey have attempted to unsettle colonial state power and territorial politics.⁴³ As terrain is weaponized, however, what Derek Gregory calls "the obdurate and resistant forces of an inhuman nature" also complicate such efforts. Gaston Gordillo refers to the "irreducible materiality" of the "raw excess of terrain" that hinders or enhances human actions.⁴⁴

Processes of extraction, settlement, and knowledge of the earth leave racializing, toxic, and often dissociative traces in living bodies and geological strata. In her contribution to this special section, Andrea Marston traces the trajectory of dehumanizing territorializations through the lens of transcontinental circulations of tin. Analyzing this process through a Marxian and geo-philosophical attention to the uneven metabolic processes embedded in tin canning, Marston unpacks the violent distribution of tin's extraction, circulation, and consumption across geosocial strata in the form of discarded tin cans and pulmonary fibrosis that unevenly affects human bodies.

In Zeynep Oguz's contribution, uneven geosocial traces are found not only in Turkey's extractive operations but also in the workings of warfare. Her ethnographic account of state-led oil shale exploration in western Turkey during the eruption of war between Kurdish freedom fighters and the Turkish state in southeastern Turkey demonstrates the structural links between and everyday disavowal of resource exploration and anti-Kurdish warfare. Holding two seemingly disparate forms of violence together, Oguz reveals the "interscalar connections between the geographically, temporally, and stratigraphically distributed forms of violence" in a moment of planetary inequality and ecological endangerment (see Oguz, this issue). Her ethnographic account further demonstrates how emergent geosocial relations between people and rocks carry the possibility of reckoning with anti-Kurdish war and violence.

Jerry Zee offers a transpacific and multitemporal take on Asian racialization and geological works centered on Richmond, British Columbia. He unpacks today's luxury construction boom financed by Chinese capital as a physical geological formation—a process of orogeny—with uncanny echoes of the extensive use of exploited Chinese manual labor for the systematic terraformation of the region's muddy coastal islands for white settlement in the nineteenth and early twentieth centuries. Drawing on both themes of inhuman territorializations and becoming geological, Zee theorizes orogenesis for the social sciences to identify "seismic collisions of Asian racialization, capital liquidity,

42. Abu El-Haj, *Facts on the Ground*; Weizman, *Hollow Land*.

43. Oguz, "Cavernous Politics."

44. Gregory, *Colonial Present*, 39; Gordillo, "Terrain as Insurgent Weapon," 61.

and evolving soil dynamics that transform river deltas into islands studded with concrete” (see Zee, this issue).

Becoming Geological

Zee’s article shows that not only has the earth become humanized, but human beings in their plurality have become shot through with geological relations. But the point of emphasizing this way of thinking is not to return to an anthropocentric focus. Nor is it only to insist on the agentic powers of the earth, although we fully subscribe to that perspective. Rather, we contend that the many ways that people exist are thoroughly constituted by so many mineralogical, geological, and planetary relations, to the point that people cannot be who they are without them. Becoming geological emphasizes the sheer durability of geosocial relations inscribed in material fact. It also reveals how subjectifying powers work through distinctive energy forms such as coal or gas, or, conversely, how the planetary can function through absent presences and impossibilities. As Jerome Whittington suggests in his article, becoming geological expresses the manifold ways that geological relations have differentially constituted human ways of being.

Tom Özden-Schilling’s intimate ethnographic work with a new kind of mineral prospecting in British Columbia, Canada, demonstrates how settler relations to land are geological. As the timber economy exhausts itself, many settlers and some Indigenous communities have turned to “desktop prospecting,” by which they review detailed digital information looking for signs of commercially relevant mineral deposits. Hence, specific forms of subjectivity and subjection combine to enable these communities to remain financially viable in the face of long-standing boom-and-bust cycles of extraction and exhaustion. What Mishuana Goeman calls the “settler grammar” of place here mutates at the same time that it replicates itself, while it is also clear that settlers’ cultural preoccupation concerns a basic apprehension about what kind of place constitutes home.⁴⁵

Becoming geological thus tracks many of the “emic” considerations associated with cultural and historical specificity, yet without demanding anything like an overt symbolic or discursive regime to make the case of cultural relevance. Nigel Clark and Rebecca Whittle’s article offers a provocative reconsideration of human evolutionary biology that brings together both climatological theories of human evolution centered on the African Rift Valley and theories related to the critical importance of distributed communal childcare arrangements for human cognitive evolution. Taking paleobiology seriously from the vantage of the social, they propose that “seismic and volcanic activity” of the African Rift Valley “played key roles in the shaping of a distinctive ‘human niche’” and thus pushed forward more rapidly certain aspects of hominin evolution. In doing so, they question widespread assumptions in the humanities about “ontological reconciliation between humans and nature that risk exacerbating the very problems they seek to resolve” (see Clark and Whittle, this issue).

45. Goeman, “Disrupting a Settler-Colonial Grammar of Place.”

In his contribution, Adam Bobbette invites geohumanities scholars to reckon with the complicated and often uncomfortable history of geopoetics. Presenting an alternative political history of geopoetics rooted in the colonial politics of Indonesia and Cold War geosciences, Bobbette's contribution demonstrates that geopoetry was the cutting edge of colonial expansion, a form of enchantment that sought to discredit Islamic syncretic cosmologies and helped shape contemporary standard narratives of earth history. For Bobbette, "contemporary geopoets might balk at such strategies as a view-from-nowhere, or raise difficult questions about the political motivations behind aspiring to such a position, or draw attention to the worlds that were violently erased through exactly such totalizing, universalizing, and mononaturalist European modernist visions" (see Bobbette, this issue).

Planetary Predicaments

As with the many, now old, debates attempting to resolve the binarism of globalization and localism, the tension between earth as an abstraction and earth as a congeries of the particular continues to confuse and distract, such as in Dipesh Chakrabarty's Hegelian dialectics of the planetary.⁴⁶ Here we emphasize Gramsci's core insight concerning praxis, when he underscored the passage from Marx's *Theses on Feuerbach*: "All mysteries which lead theory to mysticism find their rational solution in human practice and in the comprehension of this practice."⁴⁷ This observation holds for the planetary. Indeed, the transcendental metaphysics of planet and human have emerged historically alongside each other. By emphasizing distinctive earth praxes all over the world, which are neither independent of each other nor compose a unity—many of which do invoke provincial universalisms of the earth as their *raison d'être*—we believe that earth as praxis obviates many of the conceptual distractions of universalizing terms like *planet* and *human*.

Developing alternative planetary methodologies captures something of what we mean by the term *predicament*. *Predicament* implies a situation or a state of affairs, especially one that is tenuous, unpleasant, or challenging, but ultimately one that is not pre-given or obvious or that can be assumed to take on the appearance of a concrete fact. A predicament must be diagnosed within a historical moment that is never quite up to the task; as a result, it evokes an on-the-ground, fluid temporality that constantly must recompose its mottled ethics and politics.⁴⁸ It draws on Deleuze and Guattari's sense of a "cramped" minor philosophy of difference and presents an image of the planet very different from that of a passive condition or preexisting unproblematic ground for human action—the mastery neither of ourselves nor of the earth.⁴⁹

46. Chakrabarty, *Climate of History in a Planetary Age*.

47. Marx in Vogel, "What Is the 'Philosophy of Praxis'?", 19–20, citing the eighth thesis.

48. Zylinska, *Minimal Ethics*; Whyte, "Indigenous Science (Fiction) for the Anthropocene"; Liboiron, *Pollution Is Colonialism*; Simpson and Smith, "Introduction."

49. Deleuze and Guattari, *Kafka*, 17.

Whittington's take on the emergence of earth sciences in the eighteenth and nineteenth centuries underscores something of Europeans' pervasive racial anxieties provoked by planetary projects of conquest and domination that came to be concentrated by and expressed through geology and related sciences. If geology subtended questions about European superiority, this was related partly to the post-Enlightenment experience of a secular, finite, rocky, and contingent earth that was paradoxically not assumed to be made providentially for the sake of human existence. Even so, the philosophical isomorphism between the unitary earth and a unitary humanity, underwritten now by the powerful syntheses of earth system science, today frames a kind of retrograde belief that we cannot live without a specific commitment to Enlightenment reason.⁵⁰

Planetary predicaments indicate a constitutive time that is abstracted, calculated, and governed, yet at the same time shot through with alterity, uncertainty, and apprehension. In this regard, Ballestero's article shows how notions of the Anthropocene or planetarity are embedded in knowledge habits inherited from Imperial and Cold War logics and often presume the existence of an all-encompassing observer who can grasp the unity of the planet as such. Breaking from the ideal of a universal observer, her account offers an alternative methodological route for tracking geological resonance across geological and everyday scales through her emphasis on the practices of casual planetarities.

A predicament must be *faced*, that is, both composed as such and confronted. As a wide range of scholars have increasingly come to insist, the planetary challenges that humans currently face are neither homogeneous nor disconnected from each other, neither reducible to a singular global history nor to be addressed by a politics of ruination. T. J. Demos has noted that "if the end of the world proves profitable for some, then environmental humanities discourse invoking depoliticized geology only aids in further distraction."⁵¹ In particular, we push back on the many versions of apocalyptic crisis narrative to emphasize a creative affirmation of the possibilities for reimagining what it means to live on a planet. This calls for a much richer appraisal of the capacities of the earth for making possible human and more-than-human flourishing.

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50. Chakrabarty, *Climate of History in a Planetary Age*, 34.

51. Demos, *Beyond the World's End*, 8.

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