

cial superiority, cultural hegemony, and dismissive 'othering' of people and language," addressing origin stories is not just about making an alternative or alt-anthro-scene. Rather, it is to be attentive to what histories of the earth provide a break in analysis and narratives of material relations and languages of description that have colonized it, and to begin to make histories that launch a praxis for an insurgent geology into being—an insurgent geology that is, to paraphrase Brand, flooded with the world. This is where materiality is used to establish the presentness of Blackness as an obligation to the present, to counter its erasure through a poetry that cuts into coloniality as counteraesthetic (Brand 2017b). To this end, I write not toward White Geology but toward the "non-event" of a billion Black Anthropocenes.

*I must begin.*

*Begin what?*

*The only thing in the world that's worth beginning:*

*The End of the World, no less (Césaire [1956] 1969, 39)*

## Golden Spikes and Dubious Origins

Too much has been made of origins. All origins are arbitrary. This is not to say that they are not also nurturing, but they are essentially coercive and indifferent

—DIONNE BRAND, *A Map to the Door of No Return: Notes to Belonging*

The white utopia was black inferno.

—SYLVIA WYNTER, "Unsettling the Coloniality of Being/Power/Truth/Freedom: Toward the Human, After Man, Its Overrepresentation—An Argument," *The New Centennial Review*

### The Fabulation of Beginnings

As the Anthropocene signals alarm bells over human–planetary ends, the search is under way for its beginnings. To be established as an epoch, the Anthropocene must be tethered to an origin that confirms "you are Here" in the Age of Humans. In the discourse that surrounds the empirics of fossil traces, foundational myths of how and why "we" got here are being instigated. But this "we" cannot be immune to who is writing and mobilizing this history and the implications of its telling for who is granted agency in shaping the present and future. While the search for the Golden Spike is a disciplinary endeavor to geologically map the material relation of space and time according to stratigraphic principles and scientific precedents, these spikes are not real places as such; they are trace

effects in material worlds that infer the event/advent of this most political geology. In this chapter, I want to draw attention to the interlinked material and conceptual architectures of slavery and industrialization and their interlocutors, humanism and race, to argue that geologic origin stories function as identity politics that coheres around an exclusive notion of humanity (coded white). I start by examining the fabulation of beginnings in the quest for the Golden Spike as prologue to a discussion about who gets spiked by geology (or, what color is the flesh of geology?).

The scientific community offer us three possible material beginnings for the Anthropocene subject: the Columbian “exchange” and “Orbis hypothesis” event (Lewis and Maslin 2015) (1610); the Industrial Revolution and James Watt’s steam engine (1800); and the “Great Acceleration” and nuclear isotopes from missile testing. Although only informally added to the chronostratigraphic chart, the Anthropocene Working Group (AWG) delivered its findings to the thirty-fifth International Geological Congress in South Africa in 2017, and a boundary marker, or Golden Spike, will likely be agreed upon in the coming years (although there is much disagreement over what constitutes a proper boundary marker). In other words, although origins structure the axis of geological time, they are not immune to the narrative overtures that trouble questions of origination elsewhere in political geography. Graphia of rock is no less subject to world building than attempts to calcify origins in projects of nationalism. Origins draw borders that define inclusion and exclusion, and their focus is narrow, narrating a line of purpose (read Progress) and purposefulness (read Civilization), while overlooking accident, misdirection, or the shadow geology of disposable lives, waste, toxicity, contamination, extinction, and exhaustion. There is not geology on one hand and stories about geology on the other; rather, there is an axis of power and performance that meets within these geologic objects and the narratives they tell about the human story. Traveling back and forth through materiality and narrative, the origins of the Anthropocene are in-

tensely political in how they draw the world of the present into being and give shape and race to its world-making subjects.

This chapter focuses on the three moments of “Anthropogenesis” that are under consideration by the International Commission on Stratigraphy to unearth these monuments. Elsewhere, I use the term *Anthropogenesis* (Yusoff 2016) to refer to how materiality takes on an originary status in the Anthropocene; origins constitute and conjoin the site and subjective life of the Anthropocene through a geologic marker that pronounces the threshold event of becoming a geologic agent of the planet. The anthropocentrism of the Anthropocene is a world-making practice, nominating “1) the production of a mythic *Anthropos* as geologic worldmaker/destroyer of worlds, and 2) a material, evolutionary narrative that re-imagines human origins and endings within a geologic rather than an exclusively biological context” (Yusoff 2016, 3). In this ascension to geologic force, the Anthropocene creates a planetary genesis that ties the *Anthropos* to the creation of an epoch, substituting human agency for geologic processes. Thereby geology is designated as a subjective mode of the human and a universal model of material agency that has inadvertently assumed mastery over geologic processes. The sedimentation of this force of geology into subjective life is both material and semantic. As Derrida would have it, nothing that can be found in the end is not already prefigured in the origin. Origins configure and prefigure the possibility of narratives of the present: the Anthropocene-in-the-making. Origination of the event of this geologic happening organizes a material and discursive space that arranges relations of power through the constitution of beginnings and ends that reproduce formations of power in the present through an account of materialities of the past.

As a mineralogical punctuation event in geologic processes, the Anthropocene names an empire that is not yet at its end, and so any account of the gravity and tense of that trajectory accounts for, and reorganizes, understandings of ongoing geosocial processes. Origins, then, are another word for an account of agency or a tra-

jectory of power. Geology is a transactional zone in which ideas of origins, subjectivity, and matter are intertwined, with historical materialist roots that span a genealogy of dispossession, uprooting, and extreme violence. In thinking about geology as an intensely extractive praxis, there is a need to question what Eve Tuck and K. Wayne Yang (2012, 1) call settler “moves to innocence” in the claims about the newly found consciousness that permeates Anthropocenic scientific and social scientific discourse. This is the claim that humanity has failed to understand the violent repercussions of colonialism, industrialization, or capitalist modes of production and that these violences were an unforeseen by-product or excess of these practices and not a central tenet of them. Aptly, capturing the geomatrix of racial formations and land dispossession under colonialism, W. E. B. Du Bois (1920, 54) defined Whiteness as the “ownership of the Earth for ever and ever.” Taking seriously the future perfect tense of White Geology forces a consideration of *where* violence is located in geologic practices and its modes of recognition (as geologic “event” and subjective marks). The Anthropocenic “history lesson” in which humanity undergoes a sudden realization of the violent and repressive dimensions of coloniality and then, in the eclipse of modernity, puts these violences firmly in the past, while continuing to perpetuate them through an ongoing settler-colonial present, can be seen in this example from Paul Crutzen and Christian Schwäger (2011):

To master this huge shift, we must change the way we perceive ourselves and our role in the world. Students in school are still taught that we are living in the Holocene, an era that began roughly 12,000 years ago at the end of the last Ice Age. But teaching students that we are living in the Anthropocene, the Age of Men, could be of great help. Rather than representing yet another sign of human hubris, this name change would stress the enormity of humanity’s responsibility as stewards of the Earth. It would highlight the *immense power of our intellect and our creativity*, and the opportunities they offer for shaping the future. . . . The awareness of living in the *Age of Men* could inject some desperately needed eco-optimism into our societies. . . . With countries worldwide striving to attain the “*American Way of Life*,” *citizens of the West* should redefine it—and *pioneer* a

modest, renewable, mindful, and less material lifestyle. . . . We also need to develop geoeengineering capabilities in order to be prepared for worst-case scenarios. (emphasis added)

This attempt to absolve the positionality of Western colonial knowledge and extraction practices, while simultaneously reinforcing and resettling them in a new territory—a Western frontier of pioneers armed with eco-optimism and geoeengineering—indicates a desire to overcome coloniality without a corresponding relinquishing of the power it continues to generate in terms of who gets to formulate, implement, and speak to/of the future. In this imagination of humanity, the heirs of an “American Way of Life” (or white reproductive settler colonialism) structure a color line of agency. Notwithstanding the references to frontierism, Western modernity, and the “citizens of the West” as the guarantors of intellect and creativity, the epochal sea change that is imagined actually reinstates the same old story of dominion, articulated through Judeo-Christian stewardship of Empire. The colonial assumption for the responsibility for and of the world is articulated anew as the white man’s burden—a paternalism that is tied to a redemptive narrative of saving the world from harm on account of others while maintaining the protective thick skin of innocence.

What Crutzen and Schwäger (2011) do so expertly is to narrate the imagined steps toward progress and triumph over Anthropocenic conditions that are already secreted within these discursive formations. While Crutzen (2002, 23) himself notes that “these effects have largely been caused by only 25% of the world population,” his assumption of “responsibility” (and thus agency, in the formulation of origins = agency) is misplaced. It is a false evolutionism that designates a single point of experience from which departure for the future is projected. As Brand (2001, 82) reminds us, there is no ground zero in relation; “it never occurs to them that they live on the cumulative hurt of others. They want to start the clock of social justice only when they arrive. But one is born into history, one isn’t born into a void.” Right behind

claims of naming, interpretation, and description come the proposal of solutions and the delimitation of scenes of power. Crutzen presents us with a contrite Western civilization that, despite the obvious repressed excesses of its geologic formations—named the Anthropocene—continues to devise hegemonic aspirations that deny both those subjective repressions and the multisovereignties they represent. Those histories of black and brown Undercommons (Moten and Harney 2013) are contorted into an oversight of civilization, as are the environmental effects of colonialism and industrialization, making way for a present that continues to privilege the privileged. The solutions and proposals are all about the continuance of the current stasis of inequality, powered by other means. In this telling, the Anthropocene is white man's overburden.<sup>1</sup>

### Material Markers; or, *What and Who Get Marked in Anthropocene Origin Stories*

A formal geologic unit of time requires a global stratotype section and point or a Golden Spike in the strata, plus other stratigraphic markers that indicate long-term shifts in the earth system to mark the boundary. As a geologic event, the Anthropocene is unusual inasmuch as it does not present the usual millions of years to achieve its geologic swerve but must rely on decadal or century scales. As a stratigraphic event, the Anthropocene represents a compression of geologic time. As Lewis and Maslin (2015, 171) make clear,

unlike other geological time unit designations, definitions will probably have effects beyond geology. For example, defining an early start date may, in political terms, “normalize” global environmental change. Meanwhile, agreeing [on] a later start date related to the Industrial Revolution may, for example, be used to assign historical responsibility for carbon dioxide emissions to particular countries or regions during the industrial era. More broadly, the formal definition

1. Thanks to Nigel Clark for this formation of thought.

of the Anthropocene makes scientists arbiters, to an extent, of the human–environment relationship, itself an act with consequences beyond geology.

While there is recognition from geologists of the power of naming in the formalization of the Anthropocene—“formalization is a complex question because, unlike with prior subdivisions of geological time, the potential utility of a formal Anthropocene reaches well beyond the geological community” (Waters et al. 2016, 137)—this awareness of the social stakes is accompanied by a claim of the neutrality of geology as a “pragmatic” and “dispassionate” practice. Waters et al. say,

We are aware of the narratives that may be built around the Anthropocene, and how these may be influenced by boundary choice. However, we suggest that the positioning of a stratigraphic boundary should simply be pragmatically and dispassionately chosen, by the same manner in which all earlier stratigraphic boundaries were chosen, to allow the most effective practical division between what would then become (by definition) Anthropocene and pre-Anthropocene strata and history. Such a choice would, we consider, be the best guarantee that wider discussion is solidly founded on the best factual basis available. (137)

What is considered as a dimension of the possible scope of this new political geology (part geoscience, part planetary alarm) is quickly acknowledged and then passed over as geology is consigned back to inhuman objecthood and objective language. Geology as a mode of embodied thinking remains restricted, unable to acknowledge the excess of this praxis in either world or subject-making dimensions.

### 1610

The earliest suggested date in the history of material exchanges is the 1610 thesis (Lewis and Maslin 2015), dating the Anthropocene's start to the European invasion of the Americas, or “New World,” and the so-called exchange in flora and fauna. Authors Simon

Lewis and Mark Maslin call this the “Collision of the Old and New Worlds.” Tying the Anthropocene to conquest makes explicit the colonial relation, but how does this rupture of bodies, flesh, and worlds become buried in the notion of exchange and contact? On his second voyage in 1493 to the New World (modern Dominica), Columbus initiates the first transatlantic slave voyage, a shipment of several hundred Taino people sent from Hispaniola to Spain. In 1496, he returns from his second voyage, carrying around thirty Native American slaves. By 1510, there is the start of the systematic transportation of African slaves to the New World. By the time Shakespeare’s play *The Tempest* is first performed in 1611 (a year after the proposed start date), the enslaved figures of Caliban and Ariel are familiar subjects in the Old World. The “collision of the Old and New” covers over the friction of a less smooth, more corporeal set of racialized violences. In the language of exchange, it might be assumed that something was given rather than just taken. In that slippage of grammar, I want to shake the innocence of a language of description that assails this dehumanizing logic and masks its operations. The “nonevent” of this geologic corporeality is the very contact zone of geosocial relations that the Anthropocene attempts to speak to, yet it continues to do so in the progressive narrative arc, which is also a narrative of the asymmetries of colonial possession (of subjects, land, resources) and indigenous and black dispossession. This “exchange” is the directed colonial violence of forced eviction from land, enslavement on plantations, in rubber factories and mines, and the indirect violence of pathogens through forced contact and rape. Invasion instigates the disruption of ecological belonging and viable food economies and the introduction of famine and permanent malnutrition. It is the mutilation of land, personhood, spirituality, sexuality, and creativity. “No human contact, but relations of domination and submission” (Césaire [1972] 2000, 42). It was a process of alienation from geography, self, and the possibility of relation. Yet, “these heads of men, these collections of ears [collected by the barrelful by Count d’Hérison], these burned houses, these Gothic

invasions, this streaming blood, these cities that evaporate at the edge of the sword, are not to be so easily disposed of” (41). Césaire argues that the deliberate destruction and pride in dehumanization that characterized colonial conquest was not just a butchery that was inflicted on the colonized but one that also brutalized the colonizer: “the West has never been further from being able to live a true humanism—a humanism made to the measure of the world” (73). The superimposition of colonialism was a shearing of subjects from geography and the reinstatement of those subjects into a category of geology that recoded them as property, whereby extraordinary possibilities in relation to the earth were wiped out.

The arrival of Europeans in the Caribbean in 1492 and the subsequent colonialism of the Americas “led to the largest human population replacement in the past 13,000 years” and to the mixing of previous separate biotas, such as corn, maize, potatoes, sugarcane, wheat, and domesticated animals such as cows, rats, goats, and pigs in new ecological formations and plantation ecologies of the Americas (Lewis and Maslin 2015).<sup>2</sup> As Europeans invaded the Caribbean, deforming and decimating the indigenous “Caribs,” they began to use the islands as an experimental archipelago in terms of both the social organization of categories of human and the ecological arrangements of flora and fauna. The invasion of Europeans in the Americas resulted in a massive genocide of the indigenous population, leading to a decline from 54 million people in the Americas in 1492 to approximately 6 million in 1650, a result of murder, enslavement, famine, and disease. This led to a massive reduction in farming and the regeneration of forests and carbon uptake or sequestration by forests, leading to an observed decline in Antarctic ice cores of CO<sub>2</sub> in the atmosphere. This “Orbis spike” of systematic murder marks the instigation of Global-World-Space (an understanding of the world as a global entity that is

2. <http://www.nhm.ac.uk/nature-online/life/plants-fungi/seeds-oftrade/page.dsml?section=crops&page=spread&ref=maize>.

open to the conquest of the entirety of its spatialized and subjective relations). Here the enslaved are coded in parallel with material extraction under the guise of exchange. "Colonization = thin-gification" (Césaire [1972] 2000, 42), where subjectivity becomes fungible as a geographical as well as psychic and property entity. As a descriptive project in the grammar of geology, this spike naturalizes European colonial relations and their epistemological and ecological transformations. The Anthropocene cannot dust itself clean from the inventory of which it was made: from the cut hands that bled the rubber, the slave children sold by weight of flesh, the sharp blades of sugar, all the lingering dislocation from geography, dusting through diasporic generations. The shift of grammar cannot keep the rawness out.

The 1610 natal moment does, however, tie the origin of the Anthropocene to the death of 50 million indigenous people (80 to 95 percent of the population), systematic violence, and chattel slavery. This spike of brutality, sadism, and death, coupled with the subsequent dispossession of indigenous peoples from their land and the beginnings of industrial global slavery, enacts a foundational spatial inscription of colonialism (and race) into a monument of global environmental change. Inscribed in this origin of the Anthropocene is what Michael Taussig (1986, 4) calls a "space of death." The Anthropocene began with the annihilation of the Colonial Other and an epochal redescription of geography as Global-World-Space (Yusoff 2017a). That is, the fungibility of Blackness and geologic resources (as land, minerals, and ores) is coeval, predicated on the ability of the colonizer to both describe and operationalize world-space as a global entity (see Silva 2007). In this spike, the colonial Other is displaced, along with existing ecological relations and connections of the colonized to earth. As Global-World-Space is established by the colonizers, the Human and its Others are bifurcated in the production of racial difference to create two worlds of colonizer and colonized—or two different species, as Fanon would have. Coloniality cuts across both flesh and earth in the economies of valuation it established, ex-

acting an "incorporative exclusion from space" (Moten 2016, 12) for the colonized as subjective agents and agents of geography. Indigenous genocide and removal from land and enslavement are prerequisites for power becoming operationalized in premodernity, a way in which subjects get (what Wynter names) "selected" or "dysselected" from geography and coded into colonial possession through dispossession.

The color line of the colonized was not merely a consequence of these structures of colonial power or a marginal effect of those structures; it was/is a means to operationalize extraction (therefore race should be considered as foundational rather than as periphery to the production of those structures and of global space). Richard Eden, in the popular 1555 publication *Decades of the New World*, compares the people of the "New World" to a blank piece of "white paper" on which you can "paynte and wryte" whatever you wish. "The Preface to the Reader" describes the people of these lands as inanimate objects, blank slates waiting to be civilized by the Europeans:

these simple gentiles lyvinge only after the lawe of nature, may well bee likened to a smoothe and bare table unpainted, or a white paper unwritten upon, upon the which yow may at the first paynte and wryte what yow lyst. (sig. C3v)

As land is made into tabula rasa for European inscription of its militant maps, so too do Indigenes and Africans become rendered as a writ or ledger of flesh scribed in colonial grammars.

#### "Black Metamorphosis," 1452

Wynter suggests that we should in fact consider 1452 as the beginning of the New World, as African slaves are put to work on the first plantations on the Portuguese island of Madeira, initiating the "sugar-slave" complex—a massive replantation of ecologies and forced relocation of people (existing ecologies were not immune to the ravages of the new invaders, from plants and domestic

animals to microbiomes and new geomorphic regimes). Wynter argues that the importance of the New World is in its dual processes of the “reduction of Man to Labour and of Nature to Land under the impulsion of the market economy.” Wynter forcefully demonstrates how “Man” appears as the ontological signification of Whiteness and how this rational man is established as the biologically selected being, established first through Cartesian man and then through biologism as an advanced evolutionary subject within concepts of geologic time. Weheliye (2002, 27) calls this “dis-identification, wherein whiteness connotes the full humanity only gleaned in relation to the lack of humanity in blackness.” The effect of this doubling of Man/Whiteness in the natal moment of “his” heuristic formation disabuses the idea of humanity as an ontological category that has a nonracialized primacy. Weheliye argues, “In black culture this category becomes a designation that shows its finitudes and exclusions very clearly, thereby denaturalizing the ‘human’ as a universal formation while at the same time laying claim to it” (27). In reclaiming humanity as a heuristic operation rather than an ontological formation, Wynter plots the historic formation of Man as a racialized subject that is exclusionary at the point of origin, and precisely because of the history of those murderous origins. Wynter adds to her revolutionary formation of Man<sup>3</sup> (and his overrepresentation) in “Black Metamorphosis,” where she considers the relations between land and territory in

3. Wynter (2015, 23) reminds us that the “larger issue is, then, the incorporation of all forms of human being into a single homogenized descriptive statement that is based on the figure of the West’s liberal monohumanist *Man*. And this conception of being, because ostensibly natural-scientific, is biocentric.” Thus this *Man* is restricted in its biopolitical horizon to a liberal form of subjectivity that denies the ecologies and geophysics of existence. Furthermore, as Katherine McKittrick argues, “the human is tied to epistemological histories that presently value a genre of the human that reifies Western bourgeois tenets; the human is therefore wrought with physiological and narrative matters that systematically excise the world’s most marginalized” (quoted in Wynter 2015, 9).

the organization of Colonial Man’s “humanity” and the geographies of erasure that underpin it in this conquest of space.

Wynter argues that the invention of the figure of Man in 1492 as the Portuguese travel to the Americas instigates at the same time “a refiguring of humanness” (Silva 2015, 93) in the idea of race. This refiguring of slaves trafficked to gold mines is borne into the language of the inhuman, whereupon Blackness becomes characterized through its ledger of matter, which in turn populates the idea of race. Extending Wynter’s argument, 1492 marks also the structural inclusion of Man’s Others into the geological lexicon of the inhuman (as matter and energy) and the exclusion from its material wealth, whereby humanness becomes differentiated by the inhuman objectification of indigenous and black subjects. While Wynter argues that this devaluation of Blackness served the specific material purpose of labor and the colonization of Indian land, there is also a prior step in the identification of inhuman objects that generated the context of “needs” for such labor and dispossession. Voiding subjects was also about voiding a relation to earth that was embodied, organized, and intensified by those relations to place; taking place is also taking ways in which people realize themselves through the specific geologies of a land. Colonialism enacted multiple forms of geologic disruption as well as the more obvious forms of extractive dispossessions.

Wynter contends that the revaluation of black life and the resistance to dehumanization could only be made through the “creation of a counter-culture through the transplantation of their old cultures onto a strange soil, its reinvention in new and alien conditions. It was in this transplantation, this metamorphosis of an old culture into a new, that the blacks made themselves indigenous to their new land” (Wynter n.d., 46–47). This also involved the

transplantation of a traditional relationship to nature, a relationship under the inspiration of which the slave, now in exile, both adapted himself to Nature and transformed it. In this type of relationship the *land* (i.e. part of Nature) could not be regarded as a mere commodity in the land-labor-capital-relationship. New world land, like the

land in Africa was still seen as the Earth—the communal means of production. This attitude, transferred and perpetuated, was the central grid for many old beliefs which could be retranslated into a new reality. (47)

Descriptions of the lives of slaves in Jamaica in the seventeenth century by English clergyman the Rev. John Taylor stress the “great veneration” which the slaves had for “the Earth.” It may be precisely because land and labor were regarded as private property that the earth became a source of possibility to release the literal stranglehold of that incarceration in a propertied relation.

In the struggle against forms of propertied relation with the inhuman, different intimacies developed with the earth. Wynter (n.d.) discusses the importance of the plot accorded to slaves to grow their own food in slave replantation. She says,

The plot was the slave’s area of escape from the plantation, it was an area of experience which reinvented and therefore perpetuated an alternative world view, alternative consciousness to that of the plantation. This world view was *marginalized* by the plantation but never destroyed. In relation to the plot, the slave lived in a society partly created as an adjunct to the market, partly as an end in itself. (53)

While growing food was a basic requirement for the reproduction of labor power for the plantation, it also became part of the reproduction of cultural powers in a new land, to establish a less alienated relation to the earth: “Let me be contained between latitude and longitude” (Césaire [1956] 1969, 28). The relation of slave to provision ground was a relation to a contingent earth, a material relation forged in resistance to the dehumanizing of colonialism that opened a carceral geography.

The earth in its symbolic and nonabstracted forms (as a knowledge about survival in maroonage, the quotidian practices of harvesting useful plants and animals, and navigation) was a crucial aspect of slave revolts. Wynter (n.d., 71) argues, “Black slavery in the Caribbean was synonymous with black revolt against slavery. And these revolts would be crucial to the indigenization process.” Maroonage becomes the practice of cultural resistance to slav-

ery. Wild mountain and interior living was also a successful part, Wynter argues, of replantation to the new land and the confrontation with its unfamiliar geographical conditions. She discusses at length the oaths to earth that were sworn before rebellions and how these were oaths to ancestors replanted in a new land—and that such oaths could not be broken despite the horrendous torture of those captured, in a context where “property that had rebelled, thereby affirming its status as human, must be burnt (i.e. tortured) as a ‘terror’ to other ‘property’ who might want to assert their human status” (79). Kissing the earth before rebellions was an oath-act that maintained a social contract with the earth often to the point of death (81–83). Wynter argues that this “indigenization”<sup>4</sup> was a way of thinking and apprehending the material reality of slavery through a dynamic replanting of roots (or “transplanting” as Wynter calls it) in an alien context: “this is the process of black cultural resistance and response to the Middle Passage and to what lay on the farther side—the alienated reality of a New World, new not only in its geography, but also in its radically different experience” (7). Disrupting the grammar of the inhuman articulated through thirteenth- to nineteenth-century genealogies of race, planting roots through maroonage and cultivation established kinship with the earth, made in the context of natal alienation.

In the path of the totality of alienation, the achievement in Haiti was to put down roots in a “stranger” soil, which “made the soil their own” (Wynter, n.d., 17) in ways that were not predicated on

4. Wynter’s claim on indigenization and learning new forms of planting subjectivity in the earth is a means to claim back a stolen subjective-geographic relation and should not be confused with a claim of indigeneity. Within the context of settler colonialism, indigeneity rightly makes specific material claims about sovereignty and territory that are different from the claims that Wynter is making for black slaves. I believe Wynter is arguing for us to notice the creation of new material grammar outside of plantation geo-logics that humanize inhuman conditions through a relation to the earth that is planetary, not territorial.



the notion of territory under colonialism. As Price-Mars (quoted in Wynter, n.d.) said, the planet rather than humanism became the sphere of recognition for the Haiti Revolution; "our presence on a spot of that American archipelago which we 'humanized,' the breach which we made in the process of historical events to snatch our place among men," was worthy of study, a particular achievement that could be placed "within the common life of man on the planet" (Wynter, n.d., 17). Such a rupture in the fabric of colonialism's codification of personhood and space was an extraordinary reclamation of both freedom and its geographical expression. Wynter argues that since "needs produce powers just as powers produce needs," the response to the dehumanizing alienation was "to create the new vocabulary of the new existence" (Price-Mars, as quoted in Wynter, n.d., 18). Wynter argues that alienation is an inherently dynamic concept that implies change, "a consciousness of being alienated." For Price-Mars, the study of the folklore of Haiti was a study of transplantation, where indigeneity becomes fused with the site of the struggle, essentially a geographical, soil-based process of rerooting and of learning new forms of planting oneself in the earth. "Haiti where negritude rose to its feet for the first time and said it believed in its own humanity" (Césaire [1956] 1969, 29). Wynter (n.d.) calls this process "cultural metamorphosis," but it is also a geological metamorphosis tethered to the place, site, and soil of struggle.

While slave owners tried to void their subjects as inhuman objects, Wynter (n.d.) argues that black culture was creative because it had to overcome its property status to find other means of revaluation. As slaves were traded as both property and standard equivalence (for a certain amount of gold ounces), as "Native trade goods—gold, slaves, pepper, ivory, native cloths, hides, cattle and millet—were used as standards. Some European staples such as iron bars, coppers and cloth were used," the slave became interned in "metamorphosis from human entity to a market one" (32–33). Revaluation, then, required a destabilization of the relations of production in the realm of aesthetics and sense:

in other words, the oath-taking ceremonies and subsequent revolts were at one and the same time a form of praxis and an abstract theoretical activity. Neither could be separated from the other. The theory only existed in praxis; praxis was inseparable from theory. (Wynter, n.d., 139)

The embodied experience of power located in the earth was the basis of knowledge and the affirmation of a more exorbitant world or planetarity. The articulation of resistance is not a romantic appeal but a structural reorientation to the rifts of colonialism and its geosocial formations, made through the interarticulation of the inhuman in the breaks of propertied forms (see Davies 2015). This revaluation or reconstruction of value deuniversalizes the effect of the language of the inhuman. In the savage New World, the exchange was of terror, slavery, and subjugation, of barbarous executions, disfigurement, and sadistic pleasures. That is, there was no exchange; there was replantation and resistance in the praxis of the human through a relation with the earth.

## 1800

The natal moment of the 1800 Industrial Revolution, first suggested by Crutzen (2002) and favored by social scientists, locates Anthropocene origination in capitalist modes of economic and ecological production, specifically its labor forms and technological innovations. This is the tale of entrepreneurship of a few white men transforming the world with their ingenuous creations or of a political economy that is aggressively sutured to the earth's processes via the lifeblood of fossil fuels. So the explorer as hero (Columbus) is replaced by the inventor as hero (Watt and his engine) in the progress narrative of Man as the agentic center and authority of power, cut with some European genius myth to rarefying the white male subject and his imperial intellectualism. Unsurprisingly, the Capitalocene, as it was quickly redubbed, became the site of numerous investigations into the "new" metabolisms of technology and matter enabled by the combination of

fossil fuels, new engines, and the world as market. It relocated the Anthropocene back to Europe, to Britain, and claimed the history of the planet from this origination point. The revolutionary character of industrialization, as a transformative one-way street in the production of the commodity form and rising concentrations of CO<sub>2</sub> in the atmosphere, solidified in narratives as the new “sire” of geologic force. What the proliferation of Anthropocene discourse around industrialization, which I am not going to address in any detail here, does indicate is that the Anthropocene is not reducible to anthropogenic climate change or to a carbon or capitalist imaginary (or capitalism as a carbon imaginary). As Povinelli (2016) warns us, the carbon imaginary sutures us to a very particular rendering of life and death in late liberalism, one based on the governance of life through splicing the difference between geological and biological existence (see also Yusoff 2018). The racialization of epistemologies of life and nonlife is important to note here, particularly how this biocentrism (as per Wynter) prioritizes a white biopolitics. As Povinelli argues, carbon imaginaries are a site of social reproduction in the politics of knowledge—a politics that actively constructs indigenous peoples on the outside of its paradigmatic purview.

While capitalist commodity forms and their propertied relations undoubtedly transformed the atmosphere with the production of greenhouse gases (GHGs) through the burning vast quantities of coal, the creation of another kind of weather had already established its salient forms in the mine and on the plantation. Paying attention to the prehistory of capital and its bodily labor, both within coal cultures and on plantations that literally put “sugar in the bowl” (as Nina Simone sings), in those laboring workers forging the material conversions of the revolution, the muscular energy of slavery and capitalism become conglomerated. The new modes of material accumulation and production in the Industrial Revolution are relational to and dependent on their pre-productive forms in slavery and its organization of human property as extractable energy properties. Wynter argues that the racism

inherent in the construction of Europe was a complex part of the apparatus by which Western capitalism (and, ipso facto, Western civilization) fulfilled its extractive imperative and that global capitalism cannot be understood apart from large-scale black slavery out of Africa. Rather than slavery predating capitalist forms of labor, Wynter (n.d., 106) argues that the interrelation of slave labor power and free labor power in sugar production meant that the

plantation was an intrinsic and functional part of a capitalist system which consisted of a mode of production based on free wage labor coexisting and dependent on a mode of production based on slave labor. . . . The plantation mode of production was not, therefore, an anomaly within the capitalist system, it was intrinsic to the system.

As C. L. R. James ([1938] 1989) argues in *Black Jacobins*, the immense wealth from the slave trade and the Haitian sugar plantations enriched the bourgeoisies to such an extent that they were powerful enough to set in motion the French Revolution:

In other words both the hegemony of the Western bourgeoisie and of capitalism were in their origin based mainly on New World land, the forced labor of the Indian, and the conversion of man—the black man—into a commodity. The latter large-scale de-humanization of the European proletariat, followed on and *did not precede* the total negation of the black as human. Capitalism as a system therefore required the negation of the black as human. Far from being an anomaly in the rational: system of capitalism, black slavery was rationally central to capitalism as a system. (Wynter, n.d., 45–46, emphasis original)

At a material level, Catherine Hall’s project *Legacies of British Slave-Ownership* makes visible the complicity in terms of structures of slavery and industrialization that organized in advance the categories of dispossession that are already in play and historically constitute the terms of racialized encounter of the Anthropocene. In 1833, Parliament finally abolished slavery in the British Caribbean, and the taxpayer payout of £20 million in “compensation” built the material, geophysical (railways, mines, factories), and imperial infrastructures of Britain and its colonial enterprises and empire. As the

project empirically demonstrates, these legacies of colonial slavery continue to shape contemporary Britain. A significant proportion of funds were invested in the railway system connecting London and Birmingham (home of cotton production and gun manufacturing for plantations), Cambridge and Oxford, and Wales and the Midlands (for coal). Insurance companies flourished and investments were made in the Great Western Cotton Company, for example, and in cotton brokers, as well as in big colonial land companies in Canada (Canada Land Company) and Australia (Van Diemen's Land Company) and a number of colonial brokers. Investments were made in the development of metal and mineralogical technologies: Tyne Iron Co. Iron Works; Llynvi Iron Works; Dalnotter Iron Co.; New Shotts Iron Co.; Ynyscedwyn Iron Co.; J. J. Cordes; the Smithfield Company; Bristol Brass Wire and Copper Co.; Pendleton Colliery; Thomas Whitby & Co. coal, iron, and marble company; Castles and Rudgeyway coal company; Arigna Iron and Coal Mining Co.; Company for the Working of Mines, Minerals and Metals; Port Philip and Colonial Gold Mining Co.; Potosi La Paz and Peruvian Mining Association; Annotto Bay Mining Association; Alpujarras Lead Co.; and Trinidad Petroleum Co. Other funds were reinvested into Plantations Caribbean, sugar brokers and refiners, tobacco brokers, West Indian merchants, and Dominica merchants. As a ledger, the financial benefits of ending slavery reshaped the world to provide the material *pre*conditions for the Industrial Revolution and the metamorphosis of capitalist forms. As the *Legacies* project evidences and Silva (2014, 2) argues, if we pay attention to the refiguring of the commodity in the consideration of colonial expropriation, "against the conventional view that places slavery in the prehistory of capital," a case can be made in this instance for how the total value produced by slave labor continues to sustain global capital through accumulation and legacy. In this ledger of investment and the materialization of industrialization and empire sits an unseen, unrecorded history withdrawn from view in the syntax of slavery that foreshadows and reinscribes across all these relations of the globalization of capital.

The slave–sugar–coal nexus both substantially enriched Britain and made it possible for it to transition into a colonial industrialized power (triggering a massive spike in Britain's population that maps directly onto its sugar and coal production). As Marx ([1867] 1961, 760) caustically observed, "the discovery of gold and silver in America, the extirpation, enslavement and entombment in mines of the aboriginal population . . . the turning of Africa into a warren for the commercial hunting of black-skins, signalled the rosy dawn of the era of capitalist production." The slave trade, he argued, was part of the primitive accumulation of capital that preceded and fashioned the economic conditions (and institutions, such as the insurance and finance industries) for industrialization. Slavery and industrialization were tied by the various afterlives of slavery in the form of indentured and carceral labor that continued to enrich new emergent industrial powers from both the Caribbean plantations and the antebellum South. Enslaved "free" African Americans predominately mined coal in the corporate use of black power or the new "industrial slavery," as Blackman (2008) terms it. The Alabama Iron Ore and Tennessee Coal and Iron companies were the largest convict labor companies and fed the coal mines of the U.S. Steel Corporation, which built the country. Blackman argues that most enslaved mine labor in the United States occurred after the abolition of slavery in 1865 and primarily fed the industrialization of America. The labor of the coffel—the carceral penance of the rock pile, "breaking rocks out here and keeping on the chain gang" (Nina Simone, *Work Song*, 1966), laying iron on the railroads—is the carceral future mobilized at plantation's end (or the "nonevent" of emancipation). As Marx ([1867] 1961, 759–60) puts it, "the veiled slavery of the wage-workers in Europe needed, for its pedestal, slavery pure and simple in the new world. . . . Capital comes dripping from head to foot, from every pore, with blood and dirt." Arguably, the racial circumscription of slavery predates and prepares the material ground for Europe and the Americas in terms of both nation *and* empire building—and continues to sustain it.

## 1950s

While the biostratigraphic signal from colonizing the Americas remains incompletely documented according to the AWG, the favored stratigraphic marker by many authors, owing to its widespread and globally synchronous signal, is the nuclear radioisotope's from the fallout from weapons testing. According to the AWG, the geochemical residue from the Trinity atomic device at Alamogordo, New Mexico, detonated on July 16, 1945, is the start of the Global Standard Stratigraphic Age (Zalasiewicz et al. 2015). Plutonium ( $^{239,240}\text{Pu}$ ) is suggested as a good trace due to its ability to absorb into clays and organic compounds within marine sediments and because of its mostly artificial radionuclide suite, with a half-life of 24,110 years, that will be detectable in sedimentary deposits for some 100,000 years into the future (Waters et al. 2016). But as Elizabeth DeLoughrey (2013, 179) reminds us, it is not just the environment that bears the trace of these "tests"; "the body of every human on the planet now contains strontium90, a man-made by-product of nuclear detonations and forensic scientists use the traces of militarized radioactive carbon in our teeth to date human remains (as before or after the 1954 *Bravo* shot)." The nuclear stratigraphic trace would mark the more geologically dispersed events of the "Great Acceleration" of the 1950s, with its material conversions of fossil fuels; dissemination of black carbon, inorganic and spherical carbonaceous particles, worldwide; new geochemical compounds of polyaromatic hydrocarbons, polychlorinated biphenyls, and pesticide residues; doubling of soil nitrogen and phosphorus due to the Haber Bosch process of artificially producing nitrogen fertilizer; and dispersals of new materials, such as aluminum, concrete, plastics, and synthetic fibers. This array of material transformations and new mineral evolutions has both transformed the balance of geochemical materials on the earth's surface and introduced new geological substances and forces into the planetary mix.

Japanese artist Isao Hashimoto's *2053*<sup>5</sup> records a time-lapse map in a series of blips and flashes of the nuclear explosions that have taken place between 1945 and 1998, signaling that the test does not hold exclusive rights to any one domain; it overflows, accumulates, and seemingly disappears, all the while reorganizing exposures. These blips and flashes do, however, have a black and indigenous intensification. Nuclear testing marks the displacement and exposure of indigenous peoples in the Pacific Islands and the radiation of Native American and Aboriginal peoples in North America and Australia. Many islanders in the Pacific were moved and removed during U.S. nuclear tests. Bikini Atoll, for example, was subjected to thirty years of nuclear explosions, during which time islanders were moved to a range of islands (to Rongerik, then to Kwajalein). Islanders in the Atolls were both proximate to the nuclear fallout, where they were exposed to radioactive ash, and moved to uninhabitable islands, where islanders "sucked stones" to keep hunger at bay and starvation was common. Many returned to Bikini Island, despite the contamination of its water sources and foodstuffs, because the uninhabited islands to which they were moved were uninhabited for a reason. Islanders on Rongelap and Utrok exposed by the Bravo detonation (six islands were vaporized and fourteen left uninhabitable) were subject to immediate radiation from the blasts and suffered visible burns, causing both immediate and lasting epidemiological legacies and toxic intimacies with leukemia, neoplasms, and thyroid cancers. The white powder of irradiated coral dust that fell throughout the Atolls was dangerously radioactive. Not recognizing this new material substance, children played in it. As Maori poet Hone Tuwhare's 1964 poem goes, this was "No Ordinary Sun." The fallout coated Marshallese bodies, ground, trees, bread fruit, coconuts, crabs, fish, and water. This nuclear colonialism fused thermonuclear sand and poisoned air, water,

5. <https://www.youtube.com/watch?v=LLCF7vPanrY>.

and soil, dispersing radioactive elements of strontium, cesium, and iodine across strata and into bone in brown bodies.

After Bravo, the U.S. military waited seventy-two hours to pick up those exposed and transport them to Kwajalein Atoll (the location of the U.S. base) for medical examination. The 236 Marshallese were stripped naked and sprayed down before boarding the vessel. At the army base, they were treated as test subjects for the effects of radiation. The Bravo detonation instigated the human experiments in Project 4.1,<sup>6</sup> a secret U.S. Atomic Energy Commission (AEC) study, which was planned for and then authorized while Marshallese were being treated on Kwajalein and continued for years to monitor the effects of radiation on a human population. Marshallese were subjected to unconsented medical testing, and a “cross section of happy, amenable savages” (as the scientist in the AEC promotional film informs us) were brought to Chicago for examination as specimens for experimentation in a human zoo dressed up in suits “that they had to return to the U.S. government in Hawaii.” Spillers (2003, 208) suggests (on the practice of medical experimentation on sick Negroes and the profitable “atomizing” of diseased body parts) that “the procedures adopted for the captive flesh demarcate a total objectification, as the entire captive community becomes a living laboratory.” Women gave birth to what they called “jellyfish babies” because of their translucent skin and soft or absent bones. There were many congenital disorders and miscarriages. “Marshallese cancers” were some of the highest recorded in the world. The AEC film *Operation Castle* nar-

6. ‘Project 4.1 Biomedical Studies: Studies of Response of Human Beings Exposed to Significant Beta and Gamma Radiation due to Fall-Out from High Yield Weapons’: “The purposes of [Project 4.1] were to (1) evaluate the severity of radiation injury to the human beings exposed, (2) provide for all necessary medical care, and (3) conduct a scientific study of radiation injuries to human beings” (Martin and Rowland 1982, 186, 188).

7. The use and return of the suits indicate a certain performative quality in the U.S. military’s subjection of the Marshallese citizens, not unlike the rented clothing that slave dealers used on the slave blocks.

rates, “These islands, functioning as s, gave us our first real clues to the vast area affected by contamination from a high yield surface burst” (quoted in DeLoughrey 2013, 171). Islanders were returned when it was known that the island was heavily contaminated to study them as fallout “collectors” of nuclear bombs. As Spillers (2003, 207) elucidates, the grammar of containment in Blackness was a category mobilized to obscure and subjugate the human in these human experiments:

The anatomical specifications of rupture, of altered human tissue, take on the objective description of laboratory prose. . . . These undecipherable markings on the captive body render a kind of hieroglyphics of the flesh whose severe disjunctures come to be hidden to the cultural seeing by skin color.

This nuclear colonialism in the Pacific and Marshall islands used a brown strata of bodies to mitigate and absorb its geochemical shocks.

The geographies of colonial territories were key sites and subjects for the performance of militarization and scientific development (but there is no such thing as a nuclear “test”). As DeLoughrey (2013, 172) argues,

Western colonizers had long configured tropical islands into the contained spaces of a laboratory, which is to say a suppression of island history and indigenous presence. This generation of AEC ecologists embraced nuclear testing as creating a novel opportunity to study a complete ecosystem through the trace of radiation. . . . An American empire of tropical islands, circling the globe from the Pacific to the Caribbean, became a strategic space for military experimentation and the production of new scientific epistemologies like ecosystem theory.

For example, Britain exploded seven nuclear tests and seven hundred subtests<sup>8</sup> on the Aboriginal land of Maralinga Tjaruta in

8. The subtests involving plutonium, uranium, and beryllium and were code-named “Kittens,” “Rats,” and “Vixen,” which ironically are representative of the feral ecologies that accompanied settlers and had such a devastating effect on the unique flora and fauna of Australia.

southern Australia, home of the Pitjantjara and Yankunytjatjara peoples, in 1956 and 1963. Many were forcibly resettled at Yalata, but attempts to curtail access to the Maralinga site were often unsuccessful due to strong ties to country, leading to exposure to nuclear contamination. The first French test, Gerboise Bleue, was conducted in February 1960, in the context of the Algerian War (1954–62). From 1960 to 1996, France carried out 210 nuclear tests, 17 in the Algerian Sahara and 193 in French Polynesia in the South Pacific, causing vast swaths radioactive fallout across Polynesia. In the Anthropocene backloop, these very islands in Polynesia and the Marshall Islands are now subjected to rising sea levels from climate change. The Anthropocene fossil of the waste repository in the Marshall Islands, the nuclear, forty-six-centimeter-thick “Runit” dome of Portland cement that covers the radioactive material from Bikini and other islands (there were forty-two tests in total on Enewetak Atoll alone from 1948), is leaching radioactive material, causing radionuclide migration into the marine environment. Rising sea levels and the intensification of storm events threaten to take the islands and their nuclear-fused strata into the sea.

The nuclear marker both commemorates a certain period of militarization and its global dissemination and distances the impacts and responsibility for those acts, tethering them to the Cold War and its “past” geopolitical concerns. The dialogic relation of this Golden Spike to the politics of the event is truncated, as it is lodged in the event of the atomic bomb and its technological achievements rather than the effects on the peoples and ecologies of the Pacific and the more widespread nuclear colonialism and its ongoing presents in nuclear waste. Canada and Australia, for example, as settler-colonial states, are the biggest extraterritorial mining countries and are involved in the disposal and location of nuclear waste on indigenous land, often in conflict with native title claims and predated on economic impoverishment. The disposal of wastes mobilizes a new frontierism in the designation of sacrifice zones within and beyond national borders that aggregates environmental harms with anti-Blackness.

### Earth Archives, Geologic Subjects, and the Race of Strata

The continued siting or marking of indigenous territories and intergenerational flesh of indigenous populations through the exposures of environmental wastes—what is called environmental racism—prompts a need to extend Achille Mbembe’s “Decolonizing Knowledge and the Question of the Archive”<sup>9</sup> to explore the role of earth archives as material deposits that maintain a colonial relation through the extractive and waste industries, particularly through the cojoined violences of extraction practices and their ongoing legacies of toxicity (see Bebbington and Bury 2013). For example, in the New World silver mines of South America, where as much as 136,000 metric tons of silver were produced between 1500 and 1800 (80 percent of global production), enslaved Africans (estimated to be about 4 million) were put work in the mines, replacing indigenous slaves because they were deemed to be better workers and more immune to diseases such as smallpox and typhus. Spanish slavery records show that Africans were considered essential in the operation of the mines and used them to extract enormous wealth, particularly from the mountain of Potosi (which received additional investment after the British 1833 slavery payout), where the average “working” life of a miner was six to eight years (on Southern sugar plantations, it was eight to ten years). It is estimated as many as 8 million may have died from mining accidents, lung diseases caused by the mineral dust, and contamination by the mercury used in processing the silver. Nicholas Robbins (2011) argues that there was a double genocide: the initial invasion of the New World and its impact on indigenous people, then a second wave of genocide through silver mining and the afterlives of mercury pollution into the soil, ecologies, and bodies of local communities.

9. <https://africaisacountry.atavist.com/decolonizing-knowledge-and-the-question-of-the-archive>.

Similarly, the uranium mining for nuclear industry exploited and polluted Native American lands and bodies in the United States and returns in the nuclear colonialism of waste and superfund sites, where economic poverty is used as an exploitative means to reterritorialize land with the “by-products” of nuclear testing (see Kuletz 1998, 126–27). Contemporaneously, the effects of ecoimperialist measures such as REDD in the Amazon that evicted indigenous peoples of their land in attempts to offset carbon emission created elsewhere and the location of waste sites in low-income and predominately black neighborhoods continue this disproportionate legacy of harm. The imperative is to recognize the regime of offsetting—of carbon, ecosystems, deforestation, pollution, forced migration, land grabs, climate change—as a neocolonial enterprise that continues extraction through displacement of waste and the ongoing legacy of colonial “experiments.” This offsetting is achieved through the grammar of materiality that privileges equivalents above relation. As poet Kathy Jetñil-Kijiner from the Marshall Islands says, “these two issues—they’re so much bigger than us, nuclear issues and climate change and yet we [the Marshall Islands] are at that crossroad” (Laubscher 2017). In rejoinder, fellow Marshellese poet Terisa Tenei Siagatonu claims, “Everyone is effected [*sic*] by climate change but some are effected [*sic*] first. . . . For those of us who might not have the language but are still able to speak, for those of us that can’t afford rent but can’t afford to wait.”<sup>10</sup> Placed at the axis of environmental impacts, the language of “dispassionate” geology betrays itself as an economy of displacement (subjective and environmental).

As the Anthropocene names a universal geology from below, it renders a violent homogenization of subjective affects and material possibilities. The move toward a more expansive notion of humanity must be made with care. It cannot be based on the pre-

10. Terisa Tenei Siagatonu, “Layers,” <http://themissingslate.com/2017/10/01/layers/>.

supposition that emancipation is possible once the racial others and their voices are included finally to realize this universality but must be based on the recognition that these “Others” are already inscribed in the foundation formulation of the universal as a space of privileged subjectification. Through the categories of nonbeing, trajectories of colonial enterprise exclude the very subjects who make up the racialized strata of extraction and exposure. This flesh gets spiked by the Anthropocene. Thinking flesh with Spillers, as the conceptual expansion and excess of the contraction of a person into a thing, then, “we mean its seared, divided, ripped-apartness, riveted to the ship’s hole, fallen, or ‘escaped’ over board” (Spillers 2003, 206) muscularity. The division between body and flesh is an essential category difference between a captive and liberated subject position. Flesh is the “zero degree of social conceptualization that does not escape concealment under the brush of discourse or the reflexes of iconography” (Spillers 2003, 206). The geologic claims on and in black and brown flesh establish stratigraphic traces that are both bone deep and intergenerational, marking bodies with nuclear radioisotopes and skin with codes of disposability in the proximity to power and toxicity.

Precisely because modernity (and premodernity) is secured in a subjectivity that is inscribed at the onset in race, the diagnostic of the Anthropocene does not unleash any ethical crisis in liberal discourse about who is targeted by these material practices. What is at stake and what is on the front line are defined through the color line. The disembodied monuments and matter of the Golden Spike point but don’t name. This is why the Anthropocene is configured in a future tense rather than in recognition of the extinctions already undergone by black and indigenous peoples. Following in the wake of humanism, the production of the Anthropocene is predicated on Whiteness as the color of universality. While the ethical distinction of humanism rests on the distinction between what is human and what is inhuman, Blackness is established, as Mbembe argues, as the exception to this coda, consigned to the objecthood of inhuman matter. One major im-

plication of Wynter's (2015, 23) thought is that "humanness is no longer a *noun*. *Being human is a praxis*" and cannot be taken for granted as a self-explanatory category or reason. And human as praxis intersects with geological classificatory practices to inform the category designations of what is inhuman. It is this very intimacy with the life of the inhuman that the tradition of critical black thought has engaged to resurrect the domains of life that seem to be in excess of this objective language, which transmutes black subjects into different categories of materiality. This is the unseen fragment of the Anthropocene archive that needs attention, as subject and relation. Silva (2007) argues that race is foundational rather than simply formative to the production of global subjectivity and space; race cannot be dismantled through acts of inclusion, because it is the building block in the modern world system and its anchor. Furthermore, the violence of grammars of geology must change to acknowledge this inscription and develop a mode of writing that speaks beyond the objecthood of geologic materiality to its inhuman and inhumane dimensions, as material praxis and subjective condition.

If we look at the suggested natal moments of the Anthropocene, the formative role of race in the genealogy of an Anthropocenic subject and the set of environmental processes that accrue in the new subjective mode of geologic force become apparent. This genealogy from *Colonial Man to Anthropocene Man* is evident in the constitution of Anthropocene scientific cultures and in the body of popular personifications of the Anthropocene. On the front cover of the scientific journal *Nature* (519, no. 7542 [2015]), the white male body of "Anthropocene Man" is pictured gently hemorrhaging biodiversity, with an atom cloud glowing a temperate warm orange on his shoulder. Ships crisscross the Middle Passage on his chest with the wind beneath their sails, like hipster tattoos, and little black bodies stand on Africa and the Americas, populating the corners of their triangular passage. The miniature blacks are only other bodies on display, inside the peeled back skin of white masculine modernity, posited alongside the equally sized cocoa,

maize, and wheat. A cyborgian working of industry is revealed on his arm. The Human Epoch is blazed across his well-defined abs. Now read these images of Anthropocene Man next to Spillers's words: "That order [sociopolitical order of the New World], with its human sequence written in blood, *represents* for its African and indigenous peoples a scene of *actual* mutilation, dismemberment and exile. First of all, their New World, diasporic plight marked a *theft* of the *body*—a *willful* and violent (and unimaginable from this distance) severing of the captive body from its motive will, its active desire" (Spillers 2003, 206). Or take the cover of the *Smithsonian* magazine. What is represented is a Western scientist surveying the geologic bedrock, the lone liberal subject, individualized and in possession of the horizon that he surveys as his territorial acquisition. Such imagery, unsurprisingly, echoes with the colonial paintings that underpin this man's genealogy (such as the painting of Lewis and Clark's *Western Corps of Discovery* expedition 1804–6, *An Evening Reading* by Thomas Lorimer in 1941), where the cartographic imagination of the privileged surveyor accords both power and truth over the territory and a benign foresight that naturalizes the colonial gaze, reproducing and reinforcing this geopolitical conquest within a Western claim to globalism, with resonances of "Manifest Destiny." Rather than offering humanity as a cohesive possibility for Anthropocene politics, "the 'middle passages' of black culture to and in the New World are not marked so much by 'humanity' as by an acute lack thereof; a 'black hole' of humanity, so to speak" (Weheliye 2002, 26). Akin to Wright's idea of the Middle Passage to the New World as a "big bang of blackness," Ishamel Reed calls it "an Atlantic of blood. Repressed energy of anger that would form enough sun to light a solar system. A burnt-out black hole. A cosmic slave hole" (quoted in Weheliye 2002, 21). The passage to universalism in ecological or planetary terms without a redress of how that humanity was borne as an exclusionary construct, coterminus with the enslavement of some humans and the genocide of others, remains a questionable traverse.



However, contrasting (White) posthumanism and Afro-diasporic thinking, Weheliye (2002, 26) suggests that rather than dispensing with this category that was invented to hide its opposite (the inhuman), black scholars have sought to appropriate this category: "Afro-diasporic thinking has not evinced the same sort of distrust and/or outright rejection of 'man' in its universalist, post-Enlightenment guise as Western antihumanist or posthumanist philosophies. Instead, black humanist discourses emphasize the historicity and mutability of the 'human' itself, gesturing toward different, catachrestic, conceptualizations of this category." As King (2016, 1029) argues, "Blackness is raw dimensionality (symbol, matter, kinetic energy) used to make space. As space, Black bodies cannot also occupy space on human terms." Denied the space-time of the human, black people, King argues, must imagine place outside of humanist configurations of geography. While this other space-time of Blackness finds itself in the stars in Afro-futurism, there is considerable scope to find it in the quotidian spaces of the earth.

In the Anthropocenic reinscription of earth forces and global relations, Man is placed as a central organizing concept for planetary relations. This Man is both a figure of address and a mode of comprehension (if not a unit of analysis) that repositions the human in its liberal-humanist structural form at the axis of planetary concern. The "Age of Man" is a dominant and dominating mode of subjectification—of nature, the non-Western world, ecologies, and the planet. As in the illustration on the cover of *Nature*, Man is the body politic of global environmental change. This Man is heir apparent to the historical formations of Colonial Man and the privileged subject of biopolitical life. This ethical subject substantiates the hierarchies of subjectification while simultaneously maintaining the production of marginalities and minorities that fall outside of consideration in this secular yet universalizing mode. As Weheliye (2014, 8) suggests,

since bare life and biopolitics discourse largely occludes race as a critical category of analysis, as do many other current articulations

of critical theory, it cannot provide the methodological instruments for diagnosing the tight bonds between humanity and racializing assemblages in the modern era. The volatile rapport between race and the human is defined above all by two constellations: first, there exists no portion of the modern human that is not subject to racialization, which determines the hierarchical ordering of *Homo Sapiens* species into humans, not-quite-humans, and nonhumans; second, as a result, humanity has held a very different status for the traditions of the radically oppressed. Man will only be abolished "like a face drawn in the sand at the edge of the sea" if we disarticulate the modern human (Man) from its twin: racializing assemblages.

The question Weheliye asks (after Wynter) in his book *Habeas Viscus* of these twins—the human and racializing assemblages—is, what different modalities of the human would come to light if the liberal-humanist figure of Man is not taken as the master-subject? Humanity continues to persist in its current forms of inhumanity precisely because it is a humanity that is racially constituted and where racial difference is produced as an oppositional form on the outside when it is really, as Silva argues through spatialized and subjective modes, internal to the formation of such humanity. This coterminous birth of Man and his Others forms the basis for the enlightenment subject of ethical consideration, the subject around which an understanding of humanity (and inhumanity) coheres (on the conatality of liberal notions of freedom in Hegel and the organization of slavery in Haiti, see Buck-Morss 2000). This birth codifies Whiteness with freedom and Blackness with objectification and slavery,<sup>11</sup> Blackness being the position of both the unfree and the *unthought* (Hartman and Wilderson 2003). And this is precisely why Whiteness (as a formation of power) gets to "choose" environmental conditions and black and brown are still the colors of environmental exhaustion and the exposures to excess.

Thinking, alongside Silva, toward a global idea of race that is

11. And even Otherness positioned in the pursuit of freedom was itself "romancing the shadow." Morrison (1992, 37–38) suggests, "The slave population, it could be and was assumed, offered itself up as surrogate selves

not at the margins of the conceptualization of the Western ethical subject but a crucial consideration of all its modes of spatial and subjective production would mean the abandonment of Colonial Man, alongside a shift in the forms and modes of expression outside of Western epistemic traditions. In the words of Angela Last, this would be to undo geopolitics through geopoetics (Last 2015, 2017). In Last's proposal, made through the work of Caribbean geopoetics, "decolonization utilizes the geophysical not as a model for human or human-world relations, but as a tool for re-situating oneself and for reimagining global divisions" (56). This matter relation that reterritorializes the inhuman as a geopoetic resource alerts us to the grammar of material divisions that organize subjective modes, wherein geopolitical agency is designated as a quality of a privileged biopolitical subject but also the potentials for a redescription of inhuman relations. As I have argued elsewhere, "it is the very division between 'dead matter' and the privileged 'live subject' that constitutes the active politics of recognition in late liberalism. This axial division of materiality into passive and active forms, that might or might not become subjects (depending on their status on the color line), is the current bite of geopolitics" (Yusoff 2018). A new language of the earth cannot be resolved in biopolitical modes (of inclusion) because of the hierarchical divisions that mark the biocentric subject.

### Geologizing the Social

In the context of socializing geology and geologizing the social, the Anthropocene is but a blink in time in the deformation of the planet, but its original claim is to render a new quality of

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for meditation on problems of human freedom, its lure and its exclusiveness. . . . Nature without limits, natal loneliness, internal aggression . . . in other words, this slave population was understood to have offered itself up for reflections on human freedom in terms other than the abstractions of human potential and the rights of man.

the human. This origination and account of geologic mastery is another "category mistake" that can only be historically claimed if slavery and the rendering of subject as inhuman object is discounted from the experience of the human (thereby reinforcing its positioning outside the category of the human). The invasion of the "New World" produced the first geologic subjects of the Anthropocene, and they were indigenous and black. The inhuman, as both geologic property and mode of subjective relation in chattel slavery, rendered a coercive interpenetration between human and inhuman categories, or what Spillers calls an "alien intimacy" that predates the "new" imagined subject of the Anthropocene. Rather, diaspora was a social sedimentation that names the violence of geology in its inception, not as an overlooked aspect of spatial and environmental relation that can be subsequently claimed as mastery over nature and geologic force but as one that is more properly located in the grammar of *geologic determinism* established in genocide and the master-slave relation. This master-slave relation is initiated through the geologic praxis of extraction that required both slavery (first for mining) and its continuance as a mode of labor and psychic extraction of pleasure and sadism, which in turn codified Blackness in proximity to the qualities and properties of the inhuman. Defining an identity for an epoch through the geologizing of the social (and its modes of subjective relation), the origin stories of the Anthropocene construct a monolithic, post-racial "we" and singular temporality of being instead of differentiating geologic life along this praxis. Humanism is deployed as a method of erasure that obfuscates climate racism and social injustice in access to geography through differentiated histories of responsibilities and reward in geologic life (see Yusoff 2016, 6).

Wynter (2015, 24), discussing the formulation of the homogenized "we," suggests that this referent "is *not* the *referent-we* of the human species itself"; rather, it is isomorphic in its privileged subjectivity to the "we" of humanity. As Wynter goes on to suggest,

as natural scientists and also bourgeois subjects, logically assume that the *referent-we*—whose normal behaviors are destroying the habitability of our planet—is that of *the human population as a whole*. The “we” who are destroying the planet in these findings are not understood as the *referent-we* of *homo oeconomicus* (a “we” that includes themselves/ourselves as bourgeois academics). *Therefore, the proposals that they’re going to give for change are going to be devastating!* And most devastating of all for the global poor, who have already begun to pay the greatest price. . . . Devastating, because the proposals made, if nonconsciously so, are made from the perspective of *homo oeconomicus* and its attendant master discipline of economics. (24; emphasis original)

The assertion of this unity across time and space erases the very racialized ruptures and geosocial rifts that brought this Anthropocenic world into being through the stratification of flesh. As Toni Morrison (1992, 46) suggests, “the world does not become raceless or will not become unracialized by assertion. The act of enforcing racelessness in literary discourse is itself a racial act.” The birth of racial subject is tied to colonialism and the conquest of space and the codification of geology as property and properties. Thereby geologic resources and bodily resources (or racialized slavery) share a natal moment.

Challenging the celebration of those histories that produce mythic accounts, underpinned by Western geologic modes of extraction and White Imperialism, is a way to challenge not just the narration of geology but *where* and *how* we might look for its marks in a decolonizing mode of geologic relation. Undoing what Hortense Spillers calls “grammars of capture” is a way to unearth how geology moves through Blackness rather than simply against it. That is to suggest that other material relations emerge through this deformation of subjective life. Originary moments, told as the event of geology, can be thought about as “interstitial—those punctualities (in a linked series of events) that go unmarked so that the mythic view remains undisturbed” (Spillers 2003, 14). In other words, origin stories bury as much as they reveal about material relations and their genealogies. And there is a need to *desediment*

the social life of geology, to place it in the terror of its coercive acts and the interstitial moments of its shadow geology—what I call a billion Black Anthropocenes.

Let’s imagine for a moment, in the realm of a more exuberant and exacting social geology, that the Golden Spike is something that spikes or impales, that there is a flesh that underwrites this geology (human, nonhuman, inhuman). This corporeality is a way to visualize, to render sensible, to redress the social context and a contextual outside to that geology (where geology is never a formation only of materiality but also of time, and species and its twin race, explanation, and future politics). This contextual outside might be called the geotrauma of the Anthropocene’s realization—a geotrauma where flesh is the medium of exchange that organizes and modifies the Spike. Geologic relations are always material relations of power, relations that are constituted through their passage, and it is a passage of resistance. Akin to the genre of colonial paintings in which the geographic surveyor plots a territory, those lines on a map and the collections of mineral artifacts they enable have consequences; they establish unfolding *geologies*, for particular bodies and subject positions, as disposable in the shadow economy of extraction.

Naming a Spike is not just scientific triumphalism but enacts and then describes a structure and emphasis of attention or monumentalization. These Golden Spikes are both cultural edifices of political geology and monuments to extractive-racialized-industrialized complexes. What these nominations are naming, albeit obscured in the narration, is a story about the very bodies that undo strata—the theft of bodies, of the flesh that hews the rock, that plants the sugar plantation, that blasts and gets blasted in the mines, that transports and carries the pathogens and pollutions of those Spikes *as* processes of destratifications. These subjective and material actualizations of the Anthropocene are geographies of violent coercion. There is an invisible agent that carries those Golden Spikes, in their flesh, chains, hunger, and bone, and in their social formations as sound, radical poetry, critical black studies,

and subjective possibility realized against impossible conditions; there *are* a billion Black Anthropocenes that are its experiential witness and embody its modes of mattering that have no resource to the agency of history, only to being historicized in this -cene. Thus to organize a Golden Spike repressing those geologic relations that have carried it socially is to reproduce the ongoing violence of those relations. I want to think about the impaled flesh while maintaining an attention to the refusal to reproduce that racial violence as the only possible position of Blackness thereby producing Blackness and Indigeneity as a negative dialectic to White Geology.

The Golden Spike is not an abstract spike; it is an inhuman instantiation that touches and ablates human and nonhuman flesh, inhuman materials and experiences. It rides through the bodies of a thousand million cells; it bleeds though the open exposure of toxicity, suturing deadening accumulations through many a genealogy and geology. This is the alienation of geology. The fabulation of beginnings in the Anthropocene is tied to the present and its politics, but it also places emphasis on the certain continuities that structure experience from the vantage point of Western colonialism and its ongoing colonial present. Subjects, or rather, modes of subjugation, are also tethered to that event and get erased—modes that continue to reproduce themselves through racialized capitalism in the mines in South Africa and Brazil, right through to the ways in which nuclear fallout is again congressing around the island of Guam, or in the legacies of slavery through incarceration. Because all the proffered Golden Spikes impale flesh, they are sites of violence enacted on the integrity of subjectivity, corporeality, and territoriality. *Origination is displacement*. Each moment of the proposed origin stories of the Anthropocene is as colonial displacement, a migration through events that is disproportionately harbored by people of color and indigenous communities. In the spirit of a speculative geology, which the Anthropocene surely is, given its *geology-in-the-making* and future-oriented explications, considering a fuller social geology would make for a more precise

inhuman geology that also addresses the constitutive exclusions of its inhumanity.

Paying attention to the quotidian inhuman social geologies that underpin these geologic acts of spiking would enact a far more revolutionary paradigm shift in the geographies of the Anthropocene. The centrality of race to the production of humanity in the Anthropocene requires a reconfiguration of the subject at the center of white liberal ethical accounts and an acknowledgment of the role of race in the production of the global spaces that constitute the Anthropocene. I want to make several propositions about the inscription of coloniality into the Anthropocene:

1. Anthropocenic discourse enacts a foundational global inscription of race in the conception of humanity that is put forth as an object of concern in the Anthropocene. Moving toward the idea of a billion Black Anthropocenes spotlights that which is already centered in the Anthropocene—race—and would refuse the structural Whiteness of the Anthropocene in its current formation, potentially toward other, more accountable, decolonized, geosocial futures. This is why the formulation is (after Silva) *toward* the idea of a billion Black Anthropocenes and not posed as an alter-cene, in any of its guises as Capitalocene, Chulthocene, Plantationocene, and so on. An idea of a Black Anthropocene poses the question as a redescription of the Anthropocene through the racializing assemblage from which it emerged, rather than claiming a space for Blackness within or outside the Anthropocene (which it is not my place to do precisely because of the colonial histories that have scripted and described the terms of Blackness). This would be to acknowledge how the pursuit of geology made race a technology at its inception. In making the suggestion of an idea of Black Anthropocenes, I am not advocating ontological differentiation as a supplement to Western knowledge practices of modernity to “unsettle” them, or as a corrective lens upon them, to “appropriate non-hegemonic positions for . . . white introspection” (Broeck and Junker 2014, 10). There can be no address of the planetary failures of modernism or its master-subject, Man, without a commitment to overcoming extractive colonialism. Attending to the *economy of flesh* that underpins geologic practices is to attend

to an ongoing moment of origination and natal alienation, a geophysics of flesh that is Black and Brown.

2. A material and temporal *solidarity* exists between the inscriptions of race in the Anthropocene and the current descriptions of subjects that are caught between the hardening of geopolitical borders and the material de-stratification of territory. McKittrick argues that “we might re-imagine geographies of dispossession and racial violence not through the comfortable lenses of insides/outside or us/them, which repeat what Gilmore (2007, 241) calls ‘doomed methods of analysis and action,’ but as sites through which ‘co-operative human efforts’ can take place and have a place” (McKittrick 2011, 960). These Anthropocene sites in which various forms of fossilization are being enacted—mining, extraction, waste, extinction—are all geosocial sites of coproduction in which shared histories unfold within deeply unequal power relations. Within this context, the practices that constitute the contemporary Anthropocene-in-the-making and its stratifications are a product of, and reinforce, colonial divisions of power, territory, and life. Decolonization matters precisely at this moment because there is a parallel deterritorialization of material environments because of Anthropocenic processes that are compounding the (ongoing) displacement of indigenous peoples (such as in the Arctic, the Pacific, and the Marshall Islands).
3. Judith Butler (2015, 12) describes ethics as a relational description: “The ethical does not primarily describe conduct or disposition, but characterizes a way of understanding the relational framework within which sense, action, and speech become possible [a space of discourse]. The ethical describes a structure of address in which we are called upon to act or to respond in a specific way.” The ethical structure of address enacted in Anthropocene discourse should not be about a morality tale of a good or bad Anthropocene (such as that put forward by ecomodernists) but about the relational redescription of the racial mattering and spatial practices within and through geologic relations (i.e., geology and geologic force need to be posed in all their territorial implications and subjective modes). The consecration of the “event” of geology needs to be placed in its proper historic material and symbolic relation to permanently destabilize the geologic monuments of the Anthropocene and their version of historicizing

planetary relations. In a broader geontological frame, this would elucidate the fantasy of origins and the sedimentation of those stories as a structural axis of territorial belonging and subjective power. If, according to Hartman (2003, 185), “the slave occupies the position of the unthought,” then the slave also represents geology’s afterthought, inasmuch as the thirst for geologic materials unleashed certain notions of what and who could be a subject (and in parallel, what and who could be inhuman as both property and possessing valuable properties to be extracted). From the position of the unthought, Hartman asks, “What does it mean to try to bring that position into view without making it a locus of positive value, or without trying to fill the void” (185), without trying to integrate the position into a project founded on anti-Blackness and “investment in certain notions of the subject and subjection” (185)? The Anthropocene is a project initiated and executed through anti-Blackness and inhuman subjective modes, from 1492 to the present, and it cannot have any resolution through individuated liberal modes of subjectivity and subjugation. In short, that world must end for another relation to the earth to begin.

In the skin of a differently narrated geology, we get a broken event, subjects that have emerged through and in that break (to paraphrase Fred Moten) and survived despite the genocidal rage directed at them (which goes way beyond the harnessing of surplus value). Then, we have a billion Black Anthropocenes, an “Undercommons” in Moten’s and Harney’s words, that already has its own Poethical tradition (in Silva’s words, that has a different matter relation). It is a different origin story that has never had the luxury of origins, a “nonoriginal origin” in Sexton’s (2010, 41) words. This absent present in the narrative arc of the story of the “Geology of Mankind” is fractured all the way down its fault lines, through the rocks and the earth. Rifted, it has borne the mobilization and militarization of the strata and has lived the Anthropocene as a condition of survival. To quote Moten (2003, 14), “it’s the ongoing event of an antiorigin and an anteorigin, replay and reverberation of an impossible natal occasion . . . that (dis)establishes genesis.” Epochal thinking requires shattering its colonial

legacy and the articulation of the fragmentary effects of its ruptures on the “wretched of the earth” (Fanon 1963):

*My name is Bordeaux and Nates and Liverpool and New York and San Francisco  
not a corner of this world but carries my thumb-print  
and my heel-mark on the backs of skyscrapers and my dirt* (Césaire [1956]  
1969, 29–30)

Césaire continues, naming the geologies of racialized earth, concluding,

*Red earth, blood earth, blood brother earth* (29–30)

## The Inhumanities

To produce Blackness is to produce a social link of subjection and a body of extraction, that is, a body entirely exposed to the will of the master, a body from which great effort is made to extract maximum profit. An exploitable object . . .

—ACHILLE MBEMBE, *A Critique of Black Reason*

If we plumb the depths, then what we will find is fundamentally black . . . [it is] a process of disalienation. . . . I felt that beneath the social being would be found a profound being, over whom all sorts of ancestral layers and alluviums had been deposited.

—AIMÉ CÉSAIRE, *Discourse on Colonialism*

Questions of origin are never too far away from questions of difference and belonging and the various bifurcations of the human into its subcategories of fully human, subhuman, and inhuman. Origins also nurture; they grow an armature for narratives; they root a set of emplacements or belongings into place. Origins are like the importation of flora and fauna that settlers brought with them to remake their home. The unsettled had to negotiate origins, too (the voiding of origins that the Middle Passage initiated), making home in no home, taking root, a “replantation” (Wynter, n.d.) in a slave plot, where growing things is both a narrative and biophysical act. The natal alienation that is established through the inscription of the inhuman as a subject position within slavery and the dispossession of land that renders the indigenous as subhuman has consequences for how lineage is inscribed