

Introduction: Whiteness, coloniality and the Anthropocene

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In his essay “The Souls of White Folk”, written generations before the International Stratigraphy Committee would begin debating the Anthropocene concept, W.E.B. Du Bois (1920: 29) made an observation which remains as pertinent today as it was when he wrote it 1920. “I am given to understand,” he wrote, “that whiteness is the ownership of the Earth forever and ever, Amen.” Although Du Bois’ famous line is in reference to the imperial origins of World War One, it nevertheless anticipates one of the core themes of this special issue on ‘race’ and the Anthropocene, that lurking just beneath the surface of the Anthropocene concept is a racialised narrative about white Earthly possession.

The ‘Anthropocene’ is a term used in both popular and scientific discourse to designate a unit of geological time in which humanity, *anthropos*, is said to be leaving its own stratigraphic signature on Earth’s geology. The recent popularization of the term is credited to Paul Crutzen and Eugene Stoermer and their article in 2000 in the International Geosphere-Biosphere Programme Newsletter which Crutzen followed up with a piece in *Nature* in 2002. As Michael Simpson illustrates (this issue), there is a longer discursive history of an “age of man” within European scientific circles (See also Bonneuil & Fressoz, 2016), but it was only after the publication of this article that the term would gain popular notoriety and come to be considered a credible epochal label. In 2008, the Stratigraphy Commission of the Geological Society of London was the first to recommend official consideration of the inclusion of the Anthropocene into the Geological Time Scale. The International Anthropocene Working Group (AWG) was formed shortly thereafter to report to the International Union of Geological Sciences on this possibility. Throughout the 2000s entered popular discourse as a signifier of environmental crisis (see Kolbert, 2006), such that by 2011, *The Economist* could boldly declaim on its cover “Welcome to the Anthropocene.”

Up until recently the main scientific question surrounding the Anthropocene was not whether it was occurring but which stratigraphic signature should be used to distinguish it from the Holocene. In 2019, the AWG voted to recommended dating the Anthropocene at the mid-twentieth century. This decision brings the Anthropocene one step closer to becoming a geological truth. But more than simply a matter of science, the decision has important consequences for public debate about the Anthropocene. This is because the Anthropocene is a signature of *human* history. The Anthropocene’s starting date will in many ways come to shape which human history is said to have been its cause. In this way, the chosen starting date will delimit not simply a unit of geological time. So it will also shape the very historiography of the Anthropocene. If the mid-twentieth century is ratified as

the moment at which the Anthropocene commenced, then we can reasonably anticipate that official explanations of the Anthropocene will be made accountable to *this* particular moment. Moreover, any public reorientation of human values after the Anthropocene will also more than likely take the mid-twentieth century as its point of departure.

It precisely here buried within these epistemological discussions of the Anthropocene, that the structuring effect of race is most pernicious. For it is now increasingly acknowledged that the Anthropocene is not attributable to all of humanity but only to a small subset of humans clustered mainly in the West (Moore, 2015; Pulido, 2017; Vergès, 2017). This issue builds upon this mounting critique. But it is also indebted to a body of critical race and decolonial scholarship that has proved indispensable for conceptualising the epistemological blindness of science, environmentalism, and environmental history (for example: Cameron, 2015; De Leeuw & Hunt, 2018; Mahtani, 2014; McKittrick, 2013; Mollett, 2016; Sharpe, 2016; Tuck & Yang 2012). What all of this work points towards is growing recognition that the Anthropocene is a geohistorical event the stratigraphic signature of which cannot be easily decoupled from the histories of race and racism, capitalism, and European imperialism. Donna Haraway's (2015) *plantationocene*, Françoise Vergès' (2017) *racial capitalocene*, and Nick Mirzoeff's (2018) *white-supremacy-scene* are examples of an emerging lexicon which seeks to acknowledge race as a central organising category within the emerging historiography of the Anthropocene. Each of these concepts calls attention to the ways in which the Anthropocene is shaped by race, how the Anthropocene, as both a prolonged geological event and a means for renaming and, thus, repossessing Earth's history, is racialised. The papers comprising this special issue all take their cue in one way or another from this basic proposition.

If the Anthropocene is the impress of European history onto the *geos*, then each contributor, to a greater or lesser extent, responds to this claim by decentring the Eurocentrism understood to lie at the heart of Anthropocene discourse. By reading histories of European imperialism, racial capitalism, and white supremacy back into the Anthropocene concept, they join a growing chorus of voices foregrounding the racio-political substance of what is ordinarily conceived as a race-neutral, scientific category (Braidotti, 2017; Davis and Todd, 2017; Goldberg, 2015; Haraway, 2015; Kanngieser, 2015; Karera, 2019; Lewis and Maslin, 2017; Last, 2018; Malm and Hornborg, 2015; Mendieta, 2019; Pulido, 2018; Tuana, 2019; Vergès, 2017; Whyte, 2017; Yusoff, 2018).

In *A billion black Anthropocenes or none*, Kathryn Yusoff (2018), for example, brings the Anthropocene's racial unevenness sharply into focus. There she explains how the debate amongst geologists and Earth systems scientists over when the Anthropocene first began has always implicitly been one about its conditions of emergence in historical racial violence. Simon Lewis and Mark Maslin's (2015, 2017) much discussed Orbis Spike hypothesis is a case in point (see also Davis and Todd,

2017). It holds that the dip spike in atmospheric carbon in 1610 is the direct consequence of intensive carbon sequestration that followed a period of land decultivation after the decimation of Indigenous peoples in the Americas over the intervening years from 1492. Thus to speak of the Anthropocene is partly to speak of how *this* history of “murder, enslavement, famine and disease” (Yusoff, 2018: 31) inscribes “colonialism (and race) into global environmental change” (Yusoff, 2018: 32). Or consider eighteenth century industrialism. Inseparable from the American plantation economy, it relied on the conversion of enslaved labour into sugar (energy) which in turn fuelled the labouring classes of industrial Europe, including the mining of coal. Yusoff (2018) names this the “slave-sugar-coal nexus”. And the mid-twentieth century, discussed earlier, provides another episode in the Anthropocene’s racial history. Referred to as the “Great Acceleration”, this period witnessed a sudden and coincident spike in, among other things, stratospheric ozone, atmospheric carbon dioxide, ocean acidification, and shrimp farming (Steffen et al., 2015; Steffen et al., 2007). It is also marked by the bio- and lithospheric absorption of nuclear radioisotopes resulting from the proliferation of nuclear weapons testing (Zalasiewicz et al., 2015). The disproportionate irradiation of Indigenous peoples and people of colour that resulted from these tests, and the nuclear age more generally, inscribes onto this proposed Anthropocene boundary yet another racial history, what Yusoff calls “nuclear colonialism” (see also Stanley, 2013). It was precisely this geo-chemical signature the AWG had in mind when it took the decision to date the Anthropocene at the mid-twentieth century.

When we argue, then, that talking about the Anthropocene today is also to talk about race, what we mean is that the Anthropocene, like most political concepts, is inescapably racial: it is both marked by the impacts of racial categorization and at the same time is an emerging part of the production of race as an on-going structure of our lives. The signature of the Anthropocene *is* the signature of racism, the global colour line inscribed into planetary history recalibrated as geology. It bears the geological traces of white supremacy as much as it does Indigenous dispossession, primitive accumulation and the plantation economy. A marker of premature death, the Anthropocene is as much *geo-political* as it is *necropolitical* (Eichen, this issue). Which makes it all the more pressing that those of us in the interpretative social science and humanities grappling with the Anthropocene concept acknowledge Zoe Todd’s (2015) insight that the Anthropocene is a “white public space”: a space which “erases the differential histories and relationships that have led to current environmental crises.” The inherent danger of the Anthropocene concept is that in establishing a boundary between itself and the Holocene, stratigraphers risk dissimulating the Anthropocene’s conditions of possibility in European imperialism and corresponding regimes of white supremacy. While those proposed starting dates for the Anthropocene reflect the material geographies of race and racism, it is the conceptual work of the Anthropocene, as a universalizing framework for planetary history, which entrenches whiteness as a

base principle of understanding environmental changes at the same time its relevance for analysing ecological and social circumstances is denied (Todd, 2015). When the category of the Anthropos is assumed to be universal, it repeats the “liberal forgetting” of modernity as a racial project built upon the affirmation of white progress (Lowe, 2015: 39).

This is not to cry foul of stratigraphy, even while acknowledging that the AWG is comprised overwhelmingly of white men (Raworth, 2014). It is simply to suggest that *how* we approach the Anthropocene, whether as an object of scientific research or philosophical or political reflection, has significant political consequences. The Anthropocene is not a neutral concept but can either occasion public debate on the histories and legacies of race and racism or it can be used to obscure those very same histories in the service of white public space. Fortunately, a growing conversation seems to be unfolding about the relationship between the Anthropocene and race. This is both welcome and timely. The collection of essays presented in this special issue is therefore of a piece with this expanding volume of work, united in the view that the Anthropocene concept warrants sustained and rigorous analysis through the twinned approaches of critical race theory and decolonial theorisation. Our hope is that these essays will contribute to an expanding critical pedagogy of the Anthropocene, whether conceived as decolonial (Davis and Todd, 2017; Todd, 2015), anti-racist (Pulido, 2018; Verges, 2017), or feminist (Grusin, 2017; Haraway, 2015).

One of the key commonalities running across the articles that comprise this special issue is that each contributes to this pedagogy by interrogating, in broad ways, the construction of whiteness through the Anthropocene. While it is clear that the Anthropocene is certainly not a simple practice of colonial environmentalism, these contributions clarify the ways in which whiteness is fundamental to how the Anthropocene has been articulated in many instances. First, they help us to appreciate how the Anthropocene can be conceptualised as a naming event arising in response to a distinctly white, or at least European, ontological crisis—the end of the human, the end of history, or what Isabelle Stengers (2015: 43) has called the “intrusion of Gaia.” In this sense, these contributions direct us to understand the Anthropocene as a situated attempt to repossess Earth through naming amid the very undoing of whiteness. And second, as Todd (2015) argues, the Anthropocene is a naming event unfolding within a genre of white epistemology; only when scrubbed clean of its particularity does the Anthropocene acquire its unmarked universality. The trouble, however, and this is Todd’s point, is that even as a growing number of scholars in the humanities and interpretative social sciences decentre the Anthropocene’s white androcentrism, the Anthropocene remains a white public space. Its whiteness determines not only who can be heard in that space but also the very terms on which the Anthropocene debate unfolds as an object of public concern. For example, the Anthropocene now dominates how the contemporary planetary crisis is conceptualised. Yet it does so by prioritising the methods and the

institutions of stratigraphy and Earth systems science, while subordinating other epistemologies that would narrate the environmental crisis through a different set of histories, politics, and territorialities.

At this point, as editors of this collection, it is worth acknowledging our whiteness, as we are both directly implicated in the very dynamics Todd illuminates. We both work in Anglo institutions in the West and benefit regularly from white privilege, even at that same time as we work to question and decentre white privilege as an onto-epistemic structure. Our aim in bringing scholars together to think through race, whiteness, and the Anthropocene has been not simply to illustrate the importance of whiteness to the oncoming crises, but to mobilise the critique of whiteness in order to insist upon the need for a space more conducive for the telling of other stories and for other storytellers. Unless whiteness is recognised not as an identity but as an onto-epistemic structure that limits the diverse ontologies and materialities of our worlds, then it will simply end up being reified as the problem of our time: “for ever and ever, amen.” This is certainly far from the case, yet the institutional structures from which the Anthropocene discourse emanates and the diversity of those working within them leaves much to be desired. Implicated as we, as white, Anglo, male academics, are, our goal is to promote the conditions through which whiteness can be seen as a condition to be overcome, not a fact of nature. Indeed, looking at the broader geopolitical struggles that are unfolding alongside the Anthropocene and its discourse we also see very different, non-white, forms of ethno-nationalisms rising across the globe. These are similarly intertwined with the rapacious growth of capitalism and the seemingly endless accumulation of land and wealth at the expense of peoples and ecologies that are the signs of the Anthropocene (c.f Sze, 2015; Gergan, 2017). This is to say that even while the Anthropocene is a white concept, its material dimensions are not wholly reducible to whiteness, and thus demand a politics that sees the Anthropocene as a broadly racialized landscape.

Whiteness is also often assumed to be part of a binary with blackness (Moreton-Robinson, 2015). This conception, however, simplifies the production of race and creates hierarchies of difference. The articles in this special issue attempt to move beyond this binary, by highlighting how whiteness does not simply designate a subject position but is bound up with ontology that produces race as a central feature of the “human” (Sheshadri-Crooks, 2000). From that perspective, one danger held by Anthropocene discourse is that whiteness is projected unconsciously as the universal source of global impacts. In reading the Anthropocene (as naming, discourse and activism) as an outcome of the “overarching political, economic, and social system of domination” (Diangelo, 2018: 28) of whiteness, we hope not to re-inscribe whiteness into the future, but to show the cracks in this rhetoric to enable the possibility of other stories coming out. In rethinking the Anthropocene, it is our hope that these can lead to spaces for other histories – and futures – to be told, work that is indeed already happening (Karera, 2019; Todd, 2015).

The focus on narrative here is important. Narrative is precisely that which gives knowledge its meaning. Abstract concepts like the Anthropocene must be narrated in order to be comprehensible; narrative is partly what allows these concepts to resonate with their audiences. In the absence of a compelling narrative, such concepts become meaningless. This is especially so for concepts like the Anthropocene, which acquire their public significance precisely because they resonate meaningfully with various publics. If the Anthropocene is to impel a transformation of values it can only do so if comprehensible to the widest possible audience. And it is here, once again, that race and racism become of fundamental importance. This is because, as Stuart Hall (2017: 33) once described it, “hateful as racism may be as a historical fact, it is nevertheless also a *system of meaning*.” In other words, racism is a very powerful means by which the world is rendered meaningful. It invents ‘race’ as part of a classificatory schema, which only then does it use to retroactively “translat[e] historically specific structures into the timeless language of nature” (Hall 1980: 342)

The Special Issue

The papers in this special issue clearly reveal how the Anthropocene is not immune from the process of racialisation. In fact, they make very clear that narratives of the Anthropocene are themselves racial narratives. Taken together they contribute to ensuring that the discourse of the Anthropocene does not ignore the question of race, difference and exclusion, while still recognizing the material changes that usher in concern for a new geological epoch.

In opposition to the Anthropocene, geographers like Andreas Malm and Jason Moore have championed the Capitalocene to reflect the underlying economic order that has enabled the geological changes of the past 5 centuries. In his contribution, Arun Saldanha agrees that capitalism is the key agent behind contemporary environmental destruction, but argues that not identifying this economic order as a racial order misses the overall story. Not only was geological change established by an economic system that pushed cheap frontiers, but the racial capitalism that made this possible categorized contingently distinguishable bodies and positioned them differently with the geological changes. Drawing from Deleuze and Guattari, Saldanha suggests that the start of the Anthropocene, if it is to have any radical potential, must be established not just on the rise of capitalism, or the use of fossil fuels, but with the enshrinement of race as a fundamental vector of capitalism, which he argues was established in the late eighteenth century.

Sugar plantations, Joshua Eichen argues, were a central spatial technique that produced the racialized capitalocene. In a detailed analysis of the dense web of relations of slavery, deforestation, Atlantic crossings, economic exchanges and brutality, Eichen shows how fundamental the practice of slavery and sugar production was to the patterns of the proposed Anthropocene. This uneven

economic order unravels the simplicity of the Anthropocene's claims of a universal human footprint on the geological record. The slavery/sugar nexus not only propelled an incipient capitalism in Europe and reshaped the so-called "New World's" ecological landscape, it also brought with it a new temporal sphere that "had the effect of foreclosing and unsettling the possibility of present and future action." The plantation makes the future an impossibility for its subjects and the violence inherent in the production of the plantation makes this futureless inevitable in the present. That this violent futurelessness is a state (and capital) building event requires us to rethink both the Anthropocene and the state-based responses that have become enshrined within UN led climate change movement.

The Anthropocene has been proposed as a radical break from the Holocene, and a new and innovative way of understanding geological history to help establish the need for human awareness of our impact on the Earth. However, Michael Simpson argues that this radical break is built upon a long tradition within geological and earth system science dating back to the 18th century. Early Anthropocene thinkers, like the Comte de Buffon and Antonio Stoppani proposed the unfolding of geological history ended with an 'epoch of man' or the anthropozoic era. Simpson traces these developments through Vladimir Vernadsky, Pierre Teilhard de Chardin and the American George Perkins Marsh. Within these divergent legacies, Simpson argues their teleological view of history, which is still at work in contemporary Anthropocene debates, articulates a classically Eurocentric understanding humans as having moved through a progression from the state of Nature to the state of Civilization. His archeology of the Anthropocene suggests that we need pry apart "limited *epistemes* that bound and govern discussions about...the Anthropocene."

As the debate and influence of the Anthropocene makes clear, this is a geological age that has jumped the boundaries of geology into the public sphere. In her contribution Hee-Jung Joo reminds the reader that the definition of the Anthropocene depends as much on the geological determinations as our imagination. "The problem of Anthropocene," she writes, "is also one of temporality and pace; it is a problem of narrative." Her article addresses this problem by examining what climate fiction, or "cli-fi," can do for our understanding of the narrative of the Anthropocene. Through both film (*The Day After Tomorrow*, 2012, *Beasts of the Southern Wild*) and fiction (*Through the Arc of the Rain Forest*), Joo outlines both the racial logic of these cli-fi texts and the potential for rethinking the Anthropocene offered by this reading. Drawing from *Through the Arc of the Rain Forest's* magical realism, Joo illustrates the value of recognizing that the narrative of the Anthropocene itself, often assumed to be already established, is still being constructed – indeed it is impossible for it to be established. This impossibility leaves the potential for keeping race and colonialism woven into the story of the epoch.

Drawing from a similar range of fictional narratives, Mabel Gergan, Sara Smith and Pavithra Vasudevan use the genres of apocalypse present in Hollywood films to illustrate the public pedagogy of

the Anthropocene. Mapping the genres of “the Great Deluge,” “Nuclear Cataclysm,” and “The Population Bomb” onto the three main dates offered as the start of the Anthropocene, their article demonstrates the importance of race in how the public discourse of the Anthropocene is interpreted. In the apocalyptic genres they address, the future of collapse is always a future of white decline and collapse, and the triumph of the Hollywood blockbuster is predicated on stemming that demise. These films prime the audience for similar interpretations of real-life disasters, reflecting and prefiguring “policy responses and ontological assumptions about the ongoing and impending effects of Anthropocene living.” The results of the analysis reminds us that the discourse of the Anthropocene plays on longstanding affects, but it also destabilizes the assumed futurity of the Anthropocene, opening up alternative futures not based on the assumed whiteness of the Anthropos.

As the Anthropocene debate increases, more and more work is challenging the implicit whiteness of the discourse. In his article, Bruce Erickson argues that the whiteness of the Anthropocene is established both by the crisis narrative of the Anthropocene and by the discourse of the geological influence of the human race. In this, the history of whiteness (in its colonial appetite for people and resources) and the future of whiteness (as the object in crisis in the Anthropocene) are built into the discourse of the Anthropocene. Using the case of a Canadian forest conservation agreement between industry and ENGO’s, Erickson shows how environmental protection justified the infringement of Indigenous rights to these forests. The future, in this instance, becomes the Anthropocene’s justification for ignoring race in a racially unjust landscape.

Finally, Timothy Luke examines the broad reach of the Anthropocene as a story about the earth, focusing on how the universalism of the Anthropocene is established in both scientific and popular discourse. Pairing the growth of the scientific consensus around the Anthropocene to the popular representations of the Anthropocene, most specifically in Roy Scranton’s (2015) *Learning to Die in the Anthropocene*, Luke warns that the Anthropocene engenders a focus on the technical as opposed to the complicated economic and racial dynamics that have motivated ‘civilization.’ Thus, even in Scranton’s more social analysis, it is the biophysical processes that produce the results, not the ontological twinning of colonialism and capitalism. In this approach, the Anthropocene produces not just a public aware of environmental collapse, but also a class of political/physical scientists that hold the key to the future. These Anthropocenarians, “mystify whiteness, wealth and the West whose racial violence, technical prowess, and environmental degradation make fossil fuel capitalism work.”

As noted earlier, the Anthropocene is increasingly contested for the ways in which it articulates with concepts of race, nature and the environment. Our hope is that this special issue on race and Anthropocene will contribute meaningfully to this expanding set of discussions. Although each article is unique, as a collection, they together provide a means for understanding how the Anthropocene is born out of and, thus, a particular moment in what Leon Sealy-Huggins (2019) has called the “apocalyptic trajectory of racial capitalism” (no pagination). While broad in their focus, they coalesce to address the Anthropocene’s temporal foreclosures, its racial connotations, but perhaps above all how, as an ontological category, the Anthropocene is itself intimately bound up with the onto-epistemology of whiteness. One important conclusion we draw from this collection is that any critical pedagogy of the Anthropocene should set for itself the task of dismantling the racial Anthropocene.

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