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supposed to trust. In a special yearbook issue *The year of physical anthropology*, Susan Anton, Ripan Malhi and Agustin Fuentes point out that, 'No matter how well-intended the practitioners, social and political ignorance can lead to "cultural harm" in scientific research, resulting in mistrust, stigmatization, or weakened political authority for communities whose members participate in these studies' (Anton, Malhi and Fuentes 2018, 159). The chance for mitigating these harmful effects in social sciences comes from not allowing biases to be hidden by a false sense of what science should be.

The mission of biodeterministic imagination is thick and purposeful. It is dangerous because it codifies the inequities of race and class within a 'capitalist democracy' such as the one we have in the United States. As an archaeologist, it is through the interpretation of black biological and physical anthropologists that I have been helped to shape and inform the methods I use to interpret material remains from peoples of the past. For generations, black archaeologists and anthropologists have also felt the impact of being seen through the eyes of others and have felt the sting of a world that casts the shadow of anti-blackness upon us without any cause for concern. If these biases are allowed to be hidden under the cloak of science, then the field is fertile for agendas that are detrimental to social justice and perhaps to the social sciences writ large.

The biodeteministic imagination can be discredited over and over again. Some of the works that I have studied towards that end include biological anthropologists such as Michael Blakey, Fatimah Jackson, Teresa Leslie, Rachel Watkins and Joseph Jones. My earliest influence was the work of W. Montague Cobb. He helped me to see how the very tools used to prove my racial and social inferiority could be used as tools in disassembling the 'race' work of turn-of-the-century eugenics. Cobb actively and purposefully used the same methods and data as his white counterparts. Cobb disproved race as the defining factor in high-performance or advanced athletic skills. And now, in 2020, Michael Blakey has once again brought to our attention the direct connection to the consistent use of biological determinism which translates into a means to justify the status quo of social and political inequalities. It has finally come to the point where we must abandon the practice forever.

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Response

Michael L. Blakey

I appreciate the good discussion of colleagues that has added examples and sharpens my focus on the biodeterministic imagination. The reviewers' comments are on the whole and in different ways agreeable and encouraging. I take the opportunity, here, to clarify what I meant to say relative to some differences of interpretation which, understandably, result from our vantages on the problem.

The additional examples of palaeogenomics in Europe expose the reach of and susceptibilities to the biodeterministic imagination when the historic reasons I have discussed bring about a confluence of old evasive intuitions about natural causes, naive notions of objectivity, media fascination with these same intuitions broadly shared among the public, and the specialization of fields (an Enlightenment phenomenon) that leaves archaeologists ignorant of genetics methodologies which they and the public are inclined to believe are authoritative. The reviewers in various ways agree with the necessity of interdisciplinary conversations and approaches (which we deliberately used in the African Burial Ground Project) in order to break with reductionist and racist paradigms (Blakey 2008).

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We are also in agreement about the need for geneticists, archaeologists and other anthropologists to read critical histories of their theories and specializations. The Institute for Historical Biology calls this the raising of two mirrors: one is the mirror that biocultural anthropology lifts to society by showing its biological effects; the other mirror is lifted to ourselves for a more social and political consciousness of the societal implications of our chosen theoretical organization of a universe of objects. The public engagement I have advocated (also innovated at the African Burial Ground) is another solution to the problem of intrinsic cultural bias. Archaeologists become more aware of the societal effects of their work, and more ethically accountable, when they design their research in consultation with empowered, ethically appropriate descendant communities. That process can further critical thinking about the value and implications of research questions and the theories chosen to answer them, ultimately promoting the plural democratization of knowledge.

To those ends, Lee is correct that African diasporic scholars might contribute much to the conversations of palaeogenomic researchers. They are likely paradigm breakers (as Francis L.K. Hsu put it in the 1970s). Archaeologist Martin Wobst used to say, 'You can't jump your own shadow.' The double consciousness that Battle-Baptiste refers to has the advantage of heightened intellectual capacity to observe the deep subjectivity of whiteness because blacks tend to recognize the legitimacy of their, other, view. As I heard the head of the descendant community committee at James Madison's Montpelier (James French) say, the major ingredient that the Enlightenment lacked was 'us', or perspectives of the 'other' or human majority upon its world, who were not Europeans constructing whiteness in a natural universe borrowed from Christendom.

As 'we' continue to report, however, anthropology remains an intellectually gated community. Only a tiny fraction of African-diasporic scholars, equating to tokens, are included in syllabi (Beliso-De Jesus and Pierre 2019). Diasporic, subaltern, women or 'Excentric' (Harrison 2008) anthropologists must retain self-respect for their own, historically distinct, imaginations and abundantly published intellectual traditions, whether or not whites are deaf to them. I have also seen black geneticists capitulate to this imagination as scientistic gene believers. Some simply sell out for funding or in loyalty to those who have it.

Logically, black archaeologists who appreciate history should do better, just don't 'drink the Kool-Aid' (an allusion to the suicide poisonings inspired by an ideological frenzy at Jonestown, Guiana). This is obviously not a biodeterministic notion of one colour being smarter than another, but recognition of the importance of social vantage for criticism and a call for everyone to read abundantly from the intellectual traditions of their own and others, even if they are to know themselves. Actually, everyone except for whites, blithely situated in the institutionalized insular arrogance of power, already does that.

This is ground I give to Lee's admonition that I do not say enough about the dearth of collaboration with diasporic archaeologists, a topic I have addressed in many ways before and will address again in an anticipated article in *Current anthropology* this year. I appreciate her emphasis on closed conversation as I focus on the related and distinct problem of biodeterminism.

The nonexistence of race in nature, now long established, is another obvious point of agreement. However, I am a little uncomfortable with its repetition in the perspectives of reviewers, not that it does not bear repeating. The problem is that this fact has become a mantra in the West. The observation of the inconsistency of population genetics with Linnaean (or any subsequent) racial classification should be a first step to destabilizing the biodeterministic implications of race, which constitute its only real poison. Otherwise, the fact that people are physiognomically varied simply stands as a lot of pretty faces. Unfortunately, many whites worldwide (anthropologists among them) rest on this point as though it is enough to say 'race does not exist'.

A recent plenary on Black Feminism Today, at the University of Massachusetts–Amherst (Whitney Battle-Baptiste, Dana-Ain Davis, Riche Barnes, and Amanda Johnson with input by Irma McClaurin, 5 October 2019), emphasized that to simply deny one's own racism is not anti-racism. I consider the denial of race to be the same. It is simply a step toward the

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disentanglement of biology and culture which, by stopping at race denial, has been twisted to evade turning to face and dismantle institutionalized white supremacy and privilege practised by members of a culturally constructed and empowered race. That is anti-racism. Nor, certainly, is 'ignor[ing] the existence of the social category of race' in any way contradictory to this new racism, as Furholt suggests (p. 23), stepping into this common evasive trap, which my essay describes. We mounted the Race: Are We So Different exhibition and its understandingrace.org website as the best the American Anthropological Association could do to return anthropologists' attention to racism, and I recommend it as a start.

As importantly, for me, race is not my overarching concern. I now understand (at the end of a 1,000-page monograph manuscript of which my essay is a chapter) that race is but one powerful subset of an Enlightenment philosophy of *nature*. Whether out of race or in DNA, the overextension of Darwinism or even of natural-ecological explanation, causes of social phenomena are externalized to evade white people's and the elite's moral responsibility for the mess of the diverse inequities they created to benefit them. The fetish of nature and the biodeterministic imagination are an essential problem embedded in Western scientific and political thought. The ideology of individualism, also reduction, colludes to atomize cause to individuals, detached (and often seen in terms of natural capacities) from group identities, institutionalized privileges/inequities, collective responsibilities and swarming consensus.

Only a critical appreciation of human-made history (as Antenor Firmin claimed) will pull us out of this fog. Of course, the organic world bears study, but why we would pour our financial and intellectual investment into what even the methodology of biodeterminism does not reveal to be more than 4 per cent of the variation (as Booth describes) needs to be explained as a systematic choice of disavowal of the remaining 96 per cent even were they to be right. Such choices do not represent an individual's racist 'intentions', a reductive (even Protestant) explanation with little relevance to actual harm. The problem is deliberately embedded in the world view of 'Western modernity' and reproduced by its institution of science as a cover for inequity. Many are working to change the culture within and without the walls of the academy. I hope to help inform decisions about where these directions lead.

T.J. Booth speaks of Reich's presumed 'Enlightenment values'. Which Enlightenment values? Its esteemed values of reason and democracy were immediately synthesized with ideas of natural inequality. Thus leaders of both the French and American Revolutions who held these swarmed on the third bourgeois revolution in Haiti hoping to crush the spread of democracy for people of African descent. Haiti remains in debt because of it. Naturalism, racism, the objectification of the other, whites' authority as neutral and objective thinkers all derive from 'Enlightenment values' in European science and societies. While I agree with its advocacy of reason and democracy, as might David Reich, he synthesizes those values with evasive racism and the biodeterministic imagination. His hypocrisy is, indeed, akin to Thomas Jefferson's duplicitous Enlightenment thought accounting 'all men' as equals and simultaneously justifying the enslavement of the majority of Virginians.

As for the simplicity of my point that Reich's vantage is that of the white elite, it is epistemologically important to position his vantage in this way and not personally. Science *is* our society. To understand his social vantage, the basic evidence that Jews were rejoined with a single Caucasian 'division', technically (Montague 1951), and joined with American whites socially and economically (Sacks 1998) after the Second World War is stated as an anthropological fact. The social position of American Jewry is therefore ironic. It is clear that their ethnic and religious community, defined by a long oppression and the motivation to oppose it, now must grapple with its more rarely threatened ascension to a culture of white privilege. Reich is no Einstein (Jerome and Taylor 2005) or Gershwin of the 1930s. One matter of confusion is that blacks' questioning of Jews may seem to them to derive from a reasonably expected anti-Semitism when, in fact, blacks meet them as *whites*. History has at times put these together against the common foe of inequity. Today, being Jewish might afford anti-racist alliance but assures nothing of the kind. Reich's

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imagination is coherently participant in whiteness and elitism. I hope this discussion helps Booth understand that simple meaning.

My discussion does not regard 'pseudoscience', as Martin Furholt and Booth emphasize. I am saying that science is intrinsically subjective to the culture in which it is imbedded (Blakey 1996b; 1998). One might simply take the disciplinary paradigms Thomas Kuhn observed and connect them to the sociopolitical influences examined by Stephen Jay Gould and one will see the institutional locking-in of the blinders of science with those of its society. It is difficult and even disparaged to think outside the box of the reporting community's common sense, which is to say ideologies or world views. As Gould shows, the leading scientists of the past (or present) who give racist, sexist and classist interpretations of their hard evidence are not pseudoscientists. Science always relies upon interpretation for meaning and interpretation is always culturally biased whatever the measurement of material objects. Lewis and associates (2011) attempted to refute Gould on this, but accidentally confirmed that the accuracy of measurement has nothing to do with either cultural neutrality or the truthfulness of the result, though these are often confounded. So the diverse vantages of interpreters matter. As Douglass (1950) pointed out at the beginning of the American nature/nurture debate (1854), the institution of science can be no more neutral than its practitioners. Neither is. Scholars can, however, work to be honest and fair to the evidence, and (as I read Douglass) to do the right thing. I only consider frauds, like Cyril Burt, to be pseudoscientists. Only there does one find the intent to defraud, but intent is irrelevant to the imagination I critique.

Regarding 'resurgence', there has been some – now pushing at the gates of reason for expression in a time of rising economic inequity, fear and mass migrations susceptible to scapegoating efforts by the elite and hysteria among their 'base'. My central point, however, is that the biodeterministic imagination continued to ferment among scholars throughout the century, taking only less explicit form since the Second World War and the anti-colonial and civil rights movements. It can only fully be put to bed if replaced by alternatives like the emerging biocultural anthropology, public health, social history and a more humanistic-if-ecological palaeo-anthropology for which genetics becomes one subjective line of evidence in a larger conversation of sociocultural data. It also will be important to acknowledge the ancestors that Battle-Baptiste has raised, who first innovated public health and biocultural research (see Du Bois 1906; and Rankin-Hill and Blakey 1994 on Cobb).

I am a bit amazed that Booth could be puzzled by the possibility that 'high-status families in Iceland come from the same families or are similar genetically to populations from the United States who score more highly on IQ tests' (p. 19). After all, for a century, eugenicists and their fascistic friends have called this the Nordic race! I call them North Western European colonials and capitalists. Colonials comprised feudal landholding families, among many others, who accrued the lion's share of wealth of slavery and resource exploitation. Would it not be interesting if Kong *et al.*'s (2017) study has actually stumbled onto biological data, unrelated to natural causes of IQ scores, that mark the continuity of white families and now-distant relatives who still build wealth upon wealth today? That would be a biocultural question.

We see big problems in the world, like the fact that academic performance is an average measure of the effects of socio-economic status; change the latter and change the former. Yet scientists even far-flung from these matters set the stage for understanding or misunderstanding these important things.

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