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James Africanus Beale Horton on Naturalism, Baconianism, and Race Science in Victorian Philosophical Anthropology

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In this paper, I show that James Africanus Beale Horton launched an internal critique of race science as it developed in the hands of Robert Knox, Carl Vogt, and James Hunt. The latter three held an inductivist Baconian conception of science. Horton shows that their practices as scientists and natural philosophers contradict their own conception of what one must do in order to do good science. Horton's critique of race science has important implications for philosophical anthropology as it took shape over the course of the nineteenth century and for our understanding of the history of African philosophy in its global context.

Keywords: James Africanus Beale Horton; Carl Vogt; Robert Knox; James Hunt; Philosophy of Race; Francis Bacon; Philosophy of Science

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1. James Africanus Beale Horton's Place in the Historiography of Philosophy and Science

In 1853, the British government moved to recruit Africans from Sierra Leone to the army's medical service as a response to fears that European medical officers were dying at an unsustainable rate in the British colonies in West Africa. This fear was not without basis. In fact, mortality rates for Europeans in their first year of residence in West Africa in the late eighteenth century were somewhere between 30% and 70% (Curtin 1961: 95). The initial mortality rate of the Europeans who participated in the second settlement of Sierra Leone in 1791 was 49%, and 35% of the Europeans who took part in the Niger Expedition of 1841–1842 died (Curtin 1961: 102–05). These mortality rates would decline in the 1840s with the increased use of quinine, but West Africa's reputation as 'the white man's grave' would continue for at least a few decades. In response to this reputation, three African students, including James Africanus Beale Horton (1835–1883), were selected to study medicine in Britain in 1855. Horton studied for three years at King's College, London, and then spent an additional year of study at the University of Edinburgh before earning his M.D. Horton would return as a medical officer in the British Army Medical Corps to British-controlled West Africa in 1859. This paper examines the importance of Horton for understanding African responses to race science and the importance of these responses to the historiography of philosophy and science.

Studying Horton's response to race science is relevant to debates about the extent to which it is 'too easy' to describe modern race science as 'pseudo-science'. Some historians of race science, such as Suman Seth, argue that the phenomenon of race science is disturbing because, aside from other things, it 'was good science done by scientists of excellent repute' (Seth 2018: 171).[1] Note that by this Seth means to claim that if we take the standards of good science as they were in place by the end of the eighteenth century or the beginning of the nineteenth century, there were people who adhered to those standards who also produced what today we would think of as morally repugnant race science. The point is that relative to their standards of what constitutes good science, those people were not really doing anything wrong methodologically speaking, and that this says something interesting, and potentially rather disturbing, about the nature of scientific inquiry itself. Nevertheless, Seth's account discounts the existence of other people who were doing good science by the standards of the time (for the sake of argument, we take on Seth's relativization and homogenization, for descriptive purposes, of the criteria that constitute good science) and who accused proponents of race science of doing poor science or even of engaging in

1. A similar point was made earlier by Sandra Harding (1993: 9).

pseudo-science. Horton's case is of great interest as an instantiation of this. For Horton was, by the testimony of his contemporaries, a tremendously competent physician and a very good anatomist.

Moreover, while it is common to think that the 'civilizing mission' was the guiding ideal behind British colonialism, this is in fact not true. 'Humanitarian' ideals were only prominent in colonial policy during the 1830s when Quakers exerted a strong influence on British colonial policy (Stocking 1987: 241). Humanitarian conceptions of the task of empire were primarily an expression of the influence of a subset of civil society, but this subset of civil society was able to influence imperial policies only for a short period of time. By the mid-nineteenth century, humanitarian conceptions of empire were on the wane, and by the late nineteenth century, they had been extinguished. As Karuna Mantena notes, the period that saw the greatest expansion of the British Empire, 1857–1914, was also the period during which the civilizing mission as a justification of imperialism was repudiated (Mantena 2010: 2; Lewis 1978: 84–5).

Narratives of the history of philosophy and science that assume that colonialism on the African continent during the Victorian period was primarily justified by its defenders by means of appeals to a civilizing mission commit a serious error. For example, Lucius T. Outlaw Jr. claims that:

> even as European and European-descended philosophers of the eighteen, nineteenth, and twentieth centuries fashion decidedly new philosophical anthropologies, socio-political philosophies, and philosophies of histories into complex Enlightenments to ground and guide quests to realize the global instantiations of Modernities in which reason-guided freedom and justice would be foundational to the spread of the racialized, capitalist civilizational projects of Eurocentrism (Amin 1989), there was almost total silence about the intended and unintended consequences for peoples African and of African descent—except for claims that colonization and enslavement would bring them much needed 'civilizing'. (Outlaw Jr. 2022)

This is a misleading statement insofar as it overemphasizes the recourse to the civilizing mission in justifications of colonialism. This seems to stem from uncritically privileging a certain canon of eighteenth and nineteenth century philosophers who are then taken as representatives of philosophical discourse on colonialism during the Victorian period.[2] In fact, Horton's opponents, Robert

2. John Stuart Mill did offer a justification of colonialism in terms of the civilizing mission. But as Mantena (2010: 21–55) notes, his position increasingly came under attack by British theorists of empire in the latter half of the nineteenth century, and it became a marginal, non-representative position. I am grateful to Iziah Topete for pressing me on this point.

Knox (1791–1862), James Hunt (1833–1869), and Carl Vogt (1817–1895), were all hostile to the civilizing mission.

Horton offered one of the earliest critiques of race science on scientific and meta-scientific grounds. Historians of race science have frequently overlooked the manner in which Africans responded to race science at the moment of its inception. This point is obviously important for the history of science, but it also has important implications for the history of philosophy, especially for attempts to understand race and racism in the history of philosophy since such attempts must take into consideration the interplay between the history of philosophy and the history of science. Serious study of the history of the concept of race in the nineteenth century must integrate history of philosophy with history of science (and the history of medicine) because even though there was increasing specialization over the course of the nineteenth century, disciplines where the concept of the race became important, such as anthropology and biology, were not isolated from philosophy (Bernasconi 2010; Mercier 2022).

There has been a recent increase in interest in the place of race in the writings of modern canonical European philosophers. However, while it is undoubtedly necessary to undertake such investigations and to recognize that articles like this one would not have been possible without the efforts of scholars who have investigated racism in canonical figures such as Kant and Hegel, we should also not stop there, insofar as stopping there does not in fact overturn the charge of Eurocentrism or parochialism, precisely because the circle of interlocutors is not being expanded in such cases. Instead, we are asking different questions about the same people (primarily male, white European thinkers), hence the importance of taking into consideration and critically evaluating the response of African philosophers like Horton.

Discussions of canon formation and processes of inclusion and exclusion inevitably raise the specter of canon wars. Philosophy is a late comer to the canon wars of the 1980s and 1990s. Nevertheless, being a late comer has its advantages. We are better placed, simply by virtue of hindsight, to understand some of the limitations that attended the canon wars that were carried out in literary studies departments in the 1980s and 1990s. One especially significant limitation, which has been identified by Jodi Melamed, was that the inclusion of authors from hitherto marginalized social groups was taken to be an adequate response to the political demands of those social groups (Melamed 2011: 92–5).[3] In fact, this assimilative move was used to domesticate some of the theoretical frameworks that emerged from the radical social and political movements of the 1960s and

3. I am grateful to John Harfouch for introducing me to Melamed's work.

1970s.[4] The inclusion of authors from marginalized social groups came to be seen as somehow functioning as a mark of social progress, even when those same social groups were suffering from increased rates of mass incarceration and segregation in abandoned, de-industrialized urban centers in the United States. It would be unfortunate if historians of philosophy ignored the historical context of the canon wars in their contemporary interventions in debates about canon formation in philosophy.

One must guard, as a historian of philosophy, against the over-valorization of philosophy. Diversifying the canon has it uses but it is not, by itself and unconditionally, some kind of emancipatory project.[5] Frantz Fanon warned against complacency on this front long before diversifying the philosophical canon was on the agenda. Fanon wrote that 'we would be overjoyed to learn of the existence of a correspondence between some black philosopher [philosophe nègre] and Plato. But we can absolutely not see how this fact would change the lives of eight-year-old kids working in the cane fields of Martinique or Guadeloupe' (Fanon 1952: 187; Fanon 2008: 205). It is perhaps not an obligation upon historians of philosophy to contribute to changing the lives of eight-year-old kids working in the cane fields, but it is surely an obligation upon them not to pretend that they are doing so when they are pushing for the diversification of syllabi or rethinking canons.

What then would be the motivation for turning to someone like Horton? First, there is a need to correct the notion that intellectual life on the African continent was characterized by isolation from developments that were taking place in other parts of the world and that Africa was not, in Hegel's infamous words, a 'historical part of the world [*geschichtlicher Weltteil*]' (Hegel 1970: 129). Second, and perhaps more importantly for our purposes, the case of Horton shows that even though racist scientific discourse only really faded from mainstream European discussions in the aftermath of World War II (Stepan 1982: 170 -90), decisive arguments against attempts to rank human groups based on their perceived shared physical traits were already in place by the mid-nineteenth century. However, those arguments coming from Africans like Horton were systematically ignored. This seems to indicate that the power of cogent arguments in overturning views that we today think of as being morally repugnant might be overstated. This has interesting implications for how we conceive of the function of philosophy today in relation to political and social struggles.

4. One could spell this out in terms of what Olúfẹ́mi O. Táíwò calls 'elite capture' (Táíwò 2022: 30–1). It seems to me that Melamed is describing the same phenomenon although not at the level of generality that Táíwò discusses it.

5. This is a point emphasized by Harfouch who provides a functional explanation of the invocation of diversity in North American universities (Harfouch forthcoming).

2. The Naturalistic Turn and the Opening of Pandora's Box

Understanding the nature of physical anthropology during the mid-nineteenth century is especially important because of its influence on philosophical debates about human nature. This period experienced a naturalistic methodological turn in philosophy. One can distinguish between methodological naturalism—i.e., the view that the methods of philosophy are continuous with the methods that characterize inquiry in the empirical sciences, and that philosophical discourse must start from the results obtained by the empirical sciences—and substantive naturalism, i.e., the ontological thesis that supernatural objects do not exist (Leiter 2017). For our purposes, it is methodological naturalism that is important, especially because substantive naturalism was often seen in the nineteenth century as following from a primary commitment to methodological naturalism (e.g., for Carl Vogt, who will be discussed below).[6] Ludwig Feuerbach, for example, clearly endorsed a form of methodological naturalism: 'philosophy must again unite itself with natural science, and natural science with philosophy. This unity, based on mutual need, on inner necessity, will be more durable more felicitous and more fruitful than the previous mésalliance between philosophy and theology' (Feuerbach 2012 [1842]: 172).

Defenders of racial equality in the mid-nineteenth century were faced with an argument that had the following structure: 1. Philosophical discourse on human nature must start from what the relevant empirical sciences are entitled to claim about different races (this is the result of what I call the naturalistic turn). 2. The relevant empirical sciences are entitled to claim that there are physiological and anatomical differences between different races that are correlated with differences in intellectual abilities. From these two premises the following conclusion was derived: philosophical discourse on human nature must start from the claim that there are physiological and anatomical differences between different races that are correlated with differences in intellectual abilities.

Defenders of racial equality had two options. The first option was to reject the naturalistic turn; i.e., reject the first premise (perhaps in favour of appeals to biblical authority).[7] The second option was to accept the naturalistic approach but reject the second premise, namely the thesis that the relevant empirical sciences (in particular anatomy and physiology) are entitled to claim (or that they entitle us to claim) that there are physiological and anatomical differences between the different races that are correlated with differences in intellectual abilities. Horton, as I will show in the rest of this article, tried to show that the defenders of racial inequality did not in fact adhere to the methodological standards that they themselves sub-

6. Whether this relationship of entailment holds is an interesting question, but it is not directly relevant for our considerations here.

7. This was the path taken by, for example, Martin R. Delany (1991 [1879]: 9).

scribed to when making the claim that we have an epistemic warrant for thinking that there are physiological and anatomical differences between the different races that are correlated with differences in intellectual abilities.

Horton's argument has the following form: 1. Philosophical discourse on human nature must start from what the relevant empirical sciences are entitled to claim (or what they entitle us to claim) about different races 2. The relevant empirical sciences show that there is no epistemic warrant for the claim that there are physiological and anatomical differences that are correlated with differences in intellectual abilities between different races. From these two premises, Horton derives the conclusion that philosophical discourse on human nature must start from the claim that there is no epistemic warrant for thinking that there are physiological and anatomical differences among different races that are correlated with differences in intellectual abilities. Hence, Horton's intervention takes place not only at the first order 'scientific' level, but it also has clear implications for philosophy, and especially philosophical anthropology during this period.

The real challenge is that if one abandons the idea that there is a non-material soul by virtue of which one can say that all beings that possess it are members of the same species, despite apparent physiological differences, then the unity of humankind is put into jeopardy (Curran 2011: 172–73).[8] In fact, as Andrew Curran remarks, in the second half of the eighteenth century, the study of measurable physical differences between human populations was increasingly popular, but it was not seen as not undermining the belief in human unity by thinkers such as Blumenbach (Curran 2011: 173). However, the assumption of unity was placed under pressure as the research program centered on the study of measurable physical differences accelerated and as the assumption that the human mind did not, in the words of Buffon, 'belong to the material world' was abandoned (quoted from Curran 2011: 111). The problem was that if there is nothing to humans but physiological features, then how can we make sense of the unity and moral or axiological equality of humanity given the obvious diversity of physiological features, especially once physiological features are used to track intellectual capacities? By the end of the eighteenth century, justifications of claims about racial, class, and gender hierarchies were based on appeals to physiological features (Spary 1996: 198).[9] Of course, to arrive at this point, significant shifts had to take place in philosophical anthropology, so that the study of humans came to be undertaken in a more naturalistic manner without appeals

8. This idea is also reiterated in (Smith 2015). The abandonment of the notion of a non-material soul is an example of a substantive naturalist position, which is adopted due to a commitment to methodological naturalism (i.e., the claim here is that the relevant sciences do not need to posit a non-material soul, so we should jettison the notion).

9. These appeals to physiological features also involved the abstraction of differences between peoples who were deemed to belong to the same race (Hudson 1996).

to immaterial souls. Horton, in short, had to answer the following question: can one argue for the unity of humankind in purely naturalistic terms?

The mid-nineteenth century, when Horton began writing, is identified by some historians of race science as being the period during which race science fully came into its own (Beasley 2014). By the time he was writing, Horton had to contend with figures such as Robert Knox, who turned to comparative anatomy in order to argue that the concept of 'races' refers to groups of physically distinct populations that are characterized by hereditary and immutable differences. As Knox puts it: 'Wild, visionary, and pitiable theories have been offered respecting the colour of the black man, as if he differed only in colour from the white races; but he differs in everything as much as in colour. He is no more a white man than an ass is a horse or a zebra" (Knox 1862: 245). Knox rejected monogenism. And he tried to argue that race determined any given individual's destiny, and that different races are in fact different species.

3. Hunt and the Anthropological Society of London

Knox's views on polygenism and the absolute inequality of races were given institutional embodiment by his disciple James Hunt who founded the Anthropological Society of London in 1863, which focused on racial science carried out in the Knoxian vein (Stepan 1982: 44). Here we note a difference in method between Hunt and Knox. Whereas Knox emphasizes the importance of anatomy in a programmatic sense, his book on race is mostly an account of the history and social development of different races. There is in fact surprisingly little anatomy in his book. Hunt, by contrast, focuses almost exclusively on anatomical differences. To this extent he followed Knox's methodological prescriptions but deviated from Knox's actual practices. The members of the Anthropological Society were hostile to Darwinism, seeing it as just another attempt to restate monogenism.[10] Hence, strictly speaking it is false to speak of this intellectual current as an instantiation of Social Darwinism.[11] The methodological orientation of the Anthropological Society was also anti-Darwinian insofar as its members emphasized the importance of synchronic as opposed to diachronic investigations. Moreover, Hunt thought that the problem of the origins of human races was not solvable, and that the best that one could do was to classify human beings as they currently exist. As Hunt puts it: 'In any conclusion I may draw respecting the Negro's character, no decided opinion will be implied as to the vexed question of man's origin. If the

10. This is a point which Andrea Graf misses entirely in her account of Horton's context, see (Graf 2020: 357).

11. Although Vogt can be described as a Social Darwinist, Hunt tried to downplay Vogt's Darwinism.

negro could be proved to be a distinct species from the European, it would not follow that they had not the same origin – it would render their identity of origin less likely' (Hunt 1863: 3). This also indicates that polygenesis morphed into a theory of hierarchical racial differences during the nineteenth century, rather than just a theory of origins, as its name would suggest. In fact, in Hunt's hands, this theory became a way to describe absolute, heritable, and immutable differences between different races, which are then invoked to explain the historical development of those races as well as circumscribe the potentiality of each race. But more significantly, for Hunt, the existence of immutable racial differences that can be ranked axiologically will be used to explicitly argue for the justifiability of enslavement: 'in time the truth will come out, and then the public will have their eyes opened, and will see in its true dimensions that gigantic imposture known by the name of "Negro Emancipation"' (Hunt 1863: viii).[12]

It is clear that the American Civil War casts a shadow over Hunt's discussion. In the dedication of his pamphlet *On the Negro's Place in Nature* (1863), he quotes approvingly from 'a lady who assisted in the microscopical investigations of some scientific men in the Confederate States of America' who attempts to provide a physical anthropological justification for the so-called one drop rule: 'it is an attested fact that if there is a drop of African blood in the system of a white person, it will show itself upon the scalp […] and it stands in the courts of law in the Southern Confederacy as a never-failing test, unimpeachable as a law of Nature' (Hunt 1863: viii).[13] In Hunt's writings the entire research project of anthropology is clearly directed towards a defence of slavery and despotic colonial rule. In fact, Hunt thinks that developments such as the gradual emancipation of the enslaved in the West Indies have inflicted tremendous misery upon the enslaved, and that this could have been averted had anthropological science (in the Huntian vein) been taken more seriously:

> it is painful to reflect on the misery which has been inflicted on the Negro Race, from the prevailing ignorance of Anthropological Science, especially as regards the great question of race. By our ignorance, of the wants and aspirations of the Negro, and by a mistaken theory respecting his origins, this country has been the means of inflicting a prodigious, and, at present, totally unknown amount of mischief on these people. (Hunt 1863: 52–3)[14]

12. A similar view regarding the harms caused by emancipation was expressed by Henry F. J. Guppy (1864).

13. Confederate agents in England were supportive of the work of the Anthropological Society of London (Drescher 1990: 441).

14. Note the appeal to a claim about origins, which is in fact inconsistent with what Hunt says elsewhere in his pamphlet.

For Hunt, these efforts at emancipation were driven by 'the theoretical assumption of a mental equality of the different races or species of Man' (Hunt 1862: 52–3). However, such assumptions are in fact purely theoretical (in the pejorative sense) according to Hunt, and they do not accord with the facts. As we will see below, this appeal to the facts is an expression of how Hunt thinks of himself, namely as a philosophically inclined anthropologist who does not speculate but rather builds up his case through induction from observed facts.

The facts, according to Hunt, lead to the following conclusions:

> 1. there is a far greater difference between the Negro and European than between the gorilla and chimpanzee 2. That the analogies are far more numerous between the Negro and apes, than between the European and apes. 3. That the Negro is inferior intellectually to the European 4. That the Negro is more humanised when in his natural subordination to the European than under any other circumstances. 5. That the Negro race can only be humanised and civilised by Europeans. 6. That European civilization is not suited to the Negro's requirements or character. (Hunt 1862: 51–2)

'Natural subordination' is Hunt's gloss on the 'peculiar institution'. The 'natural fact' of subordination is converted into a fact that determines questions of right. Moreover, it is important to recognize that when he speaks of the manner in which Africans can be civilized by Europeans, he means something quite specific. To think that one can engage in a civilizing project is to concede that the people that one is civilizing are improvable, but this is true only to a very limited degree for Hunt. According to him, it is true that the faculty of reasoning of Africans can be improved, but it is only as improvable as the faculty of reasoning in non-human animals: 'the reason of animals is improved to some extent by domestication and training, and that this is all we can say of the Negro' (Hunt 1863: 37). What follows from this is that any attempt to 'civilize' Africans by introducing them to modern science, for example, is doomed to failure. Moreover, if we look at claim 2, we see that while it establishes continuity between humans and animals, this continuity is differential insofar as Europeans are placed further away from animals than Africans.

4. Baconianism and the Victorian Ideal of Science

Hunt's hostility to 'theory' and his repeated appeals to purported 'facts' requires some explanation. Empirical science as it developed in nineteenth-century England drew its self-image from the Baconian ideal of modern science. This

ideal that thought of modern science as proceeding primarily through induction was shared by key Victorian philosophers of science, such as William Whewell and John Stuart Mill. This is not to say that they did not have fundamental disagreements among themselves, but they generally adopted an inductivist approach to science. Even Whewell, who has been characterized as rejecting inductivism in favour of the hypothetico-deductive method, criticizes John Herschel's idea that scientific investigations should proceed by guessing hypotheses, then deriving from these hypotheses claims about observable phenomena, followed by the observation of the relevant phenomena, where the confirmation of the claim about observable phenomena is seen as a confirmation of the original hypothesis. Whewell explicitly appeals to Francis Bacon to contend that the hypothetico-deductive method fails because it involves the 'anticipation of nature' rather than the interpretation of nature (Snyder 1997: 165). Anticipation of nature was seen as involving hasty conjectures based on insufficient observations. As Bacon put it, 'the habit of *looking only at a few things and of giving judgement on the basis of a few things* has ruined everything' (Bacon 2000 [1620]: 226). It is true that Whewell also criticizes Bacon for overemphasizing experience to the detriment of the conceptual apparatuses that allow humans to make sense of sense data, but even then, he thinks that Bacon would have acquiesced to Whewell's own approach because it accords with the spirit of Bacon's philosophy of science (Snyder 1997: 169). Hence, even in criticizing Bacon, Whewell appeals to the spirit of Bacon's philosophy, as he interprets it, against the letter of Baconian philosophy. Both Hunt and Vogt, in their contributions to race science were implicitly appealing to this Baconian ideal of science.

The nineteenth century was also the period during which there was a revival in Bacon scholarship, which resulted in the publication of the Spedding-Ellis-Heath edition of *The Works of Francis Bacon* in seven volumes from 1857 to 1859. Medical students at King's College London were expected to be familiar with Bacon, as indicated by the King's College Calendar (King's College Calendar 1856–1857: 150). Bacon cast a long shadow over nineteenth-century Victorian philosophy of science, such that even those who disagreed with him had to frame their disagreements with the letter of Baconian teachings as the result of their commitment to its spirit (Verburgt 2021). This was also true of Victorian scientists. As A. Bowdoin Van Riper puts it, 'nearly all Victorian scientists claimed to follow the empiricist methods outlined by Francis Bacon' (Van Riper 1993: 34).

One element of this self-image of Victorian modern science was a rejection of empirically unfounded speculation in favour of generalizations obtained through induction. For example, in describing his method of research in the late 1830s with respect to the question of the origin of varieties of animals and plants, Darwin describes his method in Baconian terms (as he understands Baconianism): 'My

first note-book was opened in July 1837. I worked on true Baconian principles, and without any theory collected facts on a whole-sale scale' (Darwin and Huxley 1974: 71). We shall here bracket the question of whether collecting facts without any theory is possible, and we shall also bracket the question of whether this is in fact a correct interpretation of Bacon's philosophy of science.[15] For our purposes, it is sufficient to note that such a conception of science was widespread in Victorian Britain, and that Horton's opponents explicitly adhered to it. Hunt's rejection of theories is understandable in light of Bacon's claim that one should reject 'theories' (Bacon 2000 [1620]: 49).[16] Like Hunt, Vogt also explicitly adopts an inductive Baconian philosophy of science. According to Vogt 'science […] acknowledges no other authority but its own laws resting upon well observed facts' (Vogt 1864: 203). The appeal to Bacon is even more explicit in the writings of another member of the Anthropological Society, namely John William Jackson. Jackson accuses the defenders of racial equality of being 'blinded by the *idola* of preconceived ideas' (Jackson 1979 [1866]: 123), and of engaging in 'that process of hasty and incautious generalization, against which Francis of Verulam especially warned his followers' (Jackson 1979 [1866]: 124).

We do not have to hold that Horton accepted this Baconian conception of science to show that he drew upon it in his critique of Hunt and Vogt. One can engage in a kind of immanent critique to show that the practices of one's opponents violate their own conception of the methods which are appropriate to science without thereby committing oneself to accepting the philosophy of science that is accepted by one's opponents.[17] At a meta-scientific level, Horton's central argument against Hunt and Vogt can be summarized as follows: 1. Hunt and Vogt adopt a Baconian philosophy of science 2. According to this Baconian philosophy of science, research that proceeds in terms of 'anticipations of nature' is not science properly so called 3. Race science as practiced by Hunt and Vogt proceeds in terms of 'anticipations of nature'. From these three premises, Horton derives

15. Mary Horton has tried to show that if by 'inductivism' we mean a view that presupposes that scientists can (and ought to) gather facts without any prior suppositions or hypotheses, then ascribing this view to Bacon is incorrect (Horton 1973: 271). Jagdish Hattiangadi offers a reading of Baconian induction that also emphasizes that it proceeds primarily by means of falsification, i.e., gathering evidence that would undermine hypotheses about the nature of the thing that we are studying, until we finally arrive at a hypothesis that has withstood all attempts to disprove it (Hattiangadi 2023).

16. It is especially interesting to note that in the Spedding-Ellis-Heath edition of Bacon's writings, the translation makes it seem that Bacon rejected all theories and not just groundless ones, and it was this translation which was used to develop the standard interpretation of Bacon as an inductive philosopher of science who rejected the formulation of theories which go beyond the observable evidence (Urbach 1987: 93–4).

17. Although it does seem likely that Horton, like most Victorian intellectuals, did accept this conception of science. The point is that it is not necessary to determine whether this is true in order to reconstruct his critique.

the conclusion that according to the philosophy of science that Hunt and Vogt adopt, race science as practiced by them amounts to a kind of pseudo-science.[18]

5. Horton's Baconian Critique of Race Science as a Speculative Pseudo-Science

In the preface to his *West African Countries and Peoples, British and Native, and a Vindication of the African Race* (1868), Horton makes it clear that he is going to dispute the claims put forward by members of the Anthropological Society. He writes that anyone who is acquainted with the history of England in relation to the 'African race' would find it astounding:

> that the abolition of that institution [slavery] in the Southern States of America should have produced so much bile amongst a small section in England; who, although they have had undeniable proofs of the fallacy of their arguments, and inconsistency of their statements with existing facts, have formed themselves into an association (*sic* Anthropological Society) to rake up old malice and encourage their agents abroad to search out the worst possible characteristics of the African, so as to furnish material for venting their animus against him. (Horton 2011 [1868]: i)

In this statement, Horton is making the claim that the abolition of slavery seems to have reignited anti-Black sentiment in Britain. The other element to note is that he is accusing the members of the Anthropological Society of not only sifting through travel reports and possibly manipulating their sources, in the same way that Kant and Hegel did for example,[19] but also of actively encouraging their agents who are sent out on expeditions to provide confirming evidence for their hypotheses about Africans.

Horton thought that if one wanted to summarize the views of the members of the Anthropological Society one could say that 'its object is to prove him [the African] unimprovable, therefore unimproved since the beginning, and, consequently, fitted only to remain a hewer of wood and drawer of water for members of that select society' (Horton 2011 [1868]: i). Here Horton describes the approach taken by the members of the Anthropological Society. As we have noted above, they do not really think it necessary to engage in historical investigations per se in order to ascertain the African's capacity for improvement.

18. The Baconian context is absent in Arno Sonderegger's pioneering account of Horton's critique of scientific racism (Sonderegger 2002).

19. On Kant's use and abuse of the testimony of travelers, see (Lu-Adler 2022). On Hegel, see (Bernasconi 1998).

Instead, they thought that through comparative anatomy they can prove that, in principle, Africans are not capable of improvement. Consequently, all historical evidence regarding African civilizations is either discarded by them or re-interpreted (e.g., attributing evidence of civilization in Africa to non-African populations). What Horton will attempt to do is to use his anatomical knowledge to show that one cannot demonstrate on anatomical grounds that Africans are not capable of improvement. Consequently, he will argue that anatomy shows that Africans are indeed capable of improvement, and he will draw upon history to show that this capacity has in fact been actualized when external circumstances have made it possible to actualize it. In other words, Horton thinks that a thoroughly naturalistic study of humankind points towards the necessity of historical investigations.

For Horton, it is not just a matter of the falsehood of the claims peddled by the racist members of the Anthropological Society that is at issue; he also believes that they have been gaining influence among the ruling elite in England. '[I]t would have been sufficient to treat this [scientific racism] with the contempt that it deserves, were it not that leading statesmen of the present day have shown themselves easily carried away by the malicious views of these negrophobists, to the great prejudice of that race' (Horton 2011 [1868]: i). If the members of the Anthropological Society were correct (or were able to convince policy makers that they were correct) in claiming that Africans were incapable of improvement, then the entire missionary enterprise of education would have been undermined, since the missionary project was premised on the thesis of improvability.[20] For Horton, the stakes in the debate with the members of the Anthropological Society were high: they concerned the future of education in West Africa as well as the future of any project centered around African self-governance.

Horton turns the Baconian ideal of science against his opponents. He accuses his opponents of being speculative thinkers whose views are unsupported by the relevant empirical evidence. Thus, with respect to their insistence on the immutability of races, he argues that this view seems to contradict empirical evidence (the mutability that pervades all nature) and that to hold on to it on *a priori* grounds is unjustified:

> True it is that certain peculiarities which are characteristic of a nation can be traceable for generations, however greatly admixture and other external influences may have operated on their general character; but to insist on the broad dogma that no changes have taken place in the races

20. Missionaries, in contrast to colonial officials, did subscribe to the civilizing mission, and this led to frequent clashes with the colonial administration, at least in late nineteenth-century West Africa (Táíwò 2010).

> of men, or even animals, as far back as historical evidences can be traced, is to insist on what is opposed to nature; and none but the unreflecting can be carried away by so sweeping a doctrine. (Horton 2011 [1868]: 35)[21]

Here Horton is implicitly presenting himself as an inductivist Baconian who is attempting to overturn empirically ungrounded *a priori* speculation. Horton thought that, in the words of Bacon, the proponents of race science were guilty of 'leaps from sense and particulars to the most general axioms, and from these principles and their settled truth [this method] determines and discovers intermediate axioms' (Bacon 2000 [1620]: 36).

Horton's approach anticipates the approach associated with one strand of feminist philosophy of science, namely what Sandra Harding has referred to as feminist empiricism (Harding 1992).[22] Horton, like the proponents of feminist empiricism, thought that prejudices in scientific research do not stem from the ideal standards of empirical science, but rather from an incomplete adherence to the ideal standards of empirical science. This approach can be juxtaposed with more radical strands of feminist philosophy of science, associated with standpoint theory and the strong objectivity research program, which contend that the accepted ideal standards and methods of empirical science are themselves contaminated with androcentric prejudices, such that it would not be possible to overturn androcentric prejudices at the level of the results of empirical science without also overturning established methods and standards of justification (Harding 2015: 36–40). However, there is no hint in any of Horton's work that the methods of empirical science are themselves problematic or that the very ideal of a modern empirical science somehow reflects distortive social and political influences. To this extent, he is closer to the feminist empiricist position than to the more radical strands of feminist epistemology associated with standpoint theories and the strong objectivity research program as articulated and defended by Harding. Perhaps Horton took the fact that he himself was able to show that the only way that Hunt and Vogt could arrive at their conclusions was by means of the systematic misapplication of the Baconian ideal of science, as they themselves understood it and endorsed it, to indicate that there was nothing inherently racist or prejudicial about the Baconian ideal of science.

Horton relied on his training in statistics to argue that Vogt and Hunt draw their conclusions from samples whose sizes are inadequate, and that instead

21. This was in fact the same *a priori* assumption that Darwin had demolished in 1859.

22. Harding distinguishes between spontaneous feminist empiricism and more explicit philosophizing from a feminist empiricist standpoint, but this distinction is not important for our purposes, although one could say that Horton is closer to the spontaneous feminist empiricist approach. I am grateful to Julie Walsh for pressing me on the connection with feminist debates in the philosophy of science.

of engaging in serious statistical analysis, they create 'ideal types' that are the products of their imagination. On the question of the relation between humans and apes, Horton argues that Vogt and Hunt attempt to establish the thesis that Africans are closer to apes than Europeans through biased and erroneous sampling methods: 'They placed the structure of the anthropoid apes before them, and then commenced the discussion of a series of ideal structures of the negro which only exist in their imagination, and thus endeavour to link the negroes with the brute creation' (Horton 2011 [1868]: 36). By 'ideal' here, he seems to mean a type that is not actually instantiated, but also an 'average' that is derived from an inadequate sample (both in terms of size and through the fact that it is not randomly selected). For example, Carl Vogt, whose *Lectures on Man: His Place in Creation, and in the History of the Earth* was translated into English under the auspices of the Anthropological Society, drew upon 'six Negro skeletons' when making his comparison between the 'European type' and 'the Negro type' and the 'great apes' (Vogt 1864: 172–73). Thus, while it is true, as Suman Seth claims, that statistical thinking contributed to the making of racial categories in the second half of the nineteenth century (Seth 2022), it is also true that in Horton's thought we can see how statistics might have contributed to the unmaking of the 'evidence' upon which hierarchical orderings of race were based.

Horton's training in statistics did not involve training in the calculation of sample sizes based on what came to be called the representative method in statistics in the late nineteenth and early twentieth centuries (which seeks to draw inferences about the target population by means of the study of a sample). He did not receive such formal training for the simple reason that, prior to the work of A.N. Kiaer in the 1890s, the representative method was not widely accepted in statistics (Bellhouse 1998). In fact, until the late 1890s, complete enumeration was the goal of statistical research (Bellhouse 1998). Nevertheless, in practice, Horton and his contemporaries understood that complete enumeration is often not possible, and they did have some notion, however inchoate, of the need for a representative sample. None of these provisos adversely affect Horton's criticisms of Vogt and Hunt. For if we take the ideal of complete enumeration seriously, as Horton's contemporaries did, then Vogt's appeal to six skeletons to make claims about the entire population of Black people in the world is simply unacceptable. Even with the implicit recognition that complete enumeration is not possible in pragmatic terms, Horton and his contemporaries had good reasons for thinking that a convenience sample of six skeletons is not adequate in size, even if they lacked the mathematical tools to calculate sample sizes.

With respect to the debate about mental perfectibility, both Hunt and Vogt make claims about differential mental development in different races. They claim that while the 'negro child' [sic] is equal in learning capacity to the 'white child', the development of the former is arrested while the development of the

latter continues (Hunt 1863: 11). Hunt tries to give a physical explanation of this apparent discrepancy: '[in the white races] the [frontal and coronal] sutures of the cranium' close later than in the 'dark races' (Hunt 1863: 10). Horton, however, as a practicing physician, notes that he has never observed such a difference: 'among the negro race, at least among the thousands that have come under my notice, the posterior sutures first close, then the frontal and coronal, and the contrary has never been observed by me in even a single instance' (Horton 2011 [1868]: 44).[23] Moreover, Horton himself, as a medical student at King's College London, often outcompeted white students. For example, in the 1857–1858 academic year, he won a certificate of honor in physiology (King's College Calendar 1857–1858: 190). Thus, Horton's own experiences were a counterexample to Hunt's claims.

In general, Horton does not think that people like Hunt and Vogt have empirically adequate accounts. In both cases, he emphasizes that they have not examined Africans in person. Of Hunt, he writes: 'of Dr. Hunt we must truly state that he knows nothing of the negro race, and his descriptions are borrowed from the writings of men who are particularly prejudiced against that race' (Horton 2011 [1868]: 37). Concerning Vogt, he writes of 'the wild imagination of the German philosopher' (Horton 2011 [1868]: 41). He also claims that Vogt has never seen a single African in his life, while Horton has seen thousands (Horton 2011 [1868]: 43). Horton hits the mark, because even Vogt himself recognizes that he really has not had a chance to study specimens in person. For example, when speaking of his description of the brain, Vogt writes that 'I possess no Negro brain' (Vogt 1864: 183), and that he is relying on sketches of the brain of the 'Hottentot Venus' (Sara Baartman, c. 1789–1815) to arrive at his conclusions. Sara Baartman was thus not only silenced and abused while she was alive; she was also forced to stand as a witness against other Africans after her death.[24]

One way to understand Horton's critique is to think of him as trying to show that Vogt and Hunt do not abide by the standards of scientific investigation that they explicitly purport to endorse. Horton is arguing that Vogt and Hunt systematically violate their own conceptions of science. Specifically, they do not derive their conclusions from 'well observed facts' by means of induction. Horton's claim is essentially that if a methodological commitment to Baconian inductivism is a necessary condition for an intellectual activity to be considered scientific (a claim that Vogt himself endorsed), then what Vogt was doing is not science. The important point is that Horton's interlocutors thought that a commitment to Baconian inductivism was a necessary condition for a theory to be deemed scientific,

23. Horton's response assumes that Hunt held not only that there is early closure of the sutures in Africans, but that the order of suture closure is reversed, i.e., that the frontal and coronal sutures close first in African children.

24. For an overview of the ways in which Sara Baartman has been invoked over the course of the nineteenth and twentieth centuries, see (Qureshi 2004).

and that Horton is arguing that based on his interlocutors' understanding of the philosophy of science, their theories of racial inferiority were unscientific.

6. Conclusion: Horton on the Explanatory Impotence of Biological Race

To be clear, Horton does not deny that human races exist, but he does deny that we can define races in terms of biological essences, and he also denies the thesis that the physical features used to pick out races are normatively significant. Horton's conception of race is rather close to the conception of race advanced by the contemporary philosopher of race Michael O. Hardimon. Hardimon defines race in a minimalist sense in the following way: '(1) [race is a group of human beings] which, as a group, is distinguished from other groups of human beings by patterns of visible physical features, (2) whose members are linked by a common ancestry peculiar to members of the group, and which (3) originates from a distinctive geographic location' (Hardimon 2017: 150). Note that this definition of race is deflationary and minimalist, in so far as it does not refer to essences in any way, to sharp boundaries between clusters of physical features or geographical origins, or to any properties that are normatively or morally significant. On this view, if there are races in this minimalist sense, you can identify an individual as belonging to a certain race based on patterns of visible physical features, but this identification does not tell you much about the individual in question, except where her ancestors are from. This seems quite close to Horton's own conception of race.

Horton does not deny that there are differences in the level of civilizational attainment of different peoples. After all, he is a Victorian gentleman in the sense that he believed, like other Victorian intellectuals, that there are civilized and uncivilized peoples. Moreover, Horton clearly believed that Victorian Britain was more civilized in comparison to all nineteenth-century African societies (Horton 1970 [1870]: i). However, according to Horton, the explanation of this divergence in historical development cannot refer to physical or mental differences in ability because he thinks that careful investigation of the relevant evidence shows that there is no epistemic warrant for such claims. Instead, external circumstances (accidents of history such as geographical location, wars, shifting trade routes, etc.) account for divergences. In antiquity, due to favourable external circumstances, 'Africa…was the nursery of science and literature' (Horton 2011 [1868]: 66), and Europe was in a barbaric state. Yet, changes in external conditions led to different outcomes. For Horton, the fact that a given people are at a certain stage of civilizational development does not say anything about their innate characteristics. Our concepts of race, in Horton's view, may pick

out natural kinds, but these natural kinds do not have any explanatory power when it comes to understanding the course of human history.

Horton's appeal to African achievements in antiquity is important because it also enabled him to historicize and de-naturalize anti-Black racism itself. Horton claims that 'pilgrimages were made to Africa in search of knowledge by such eminent men as Solon, Plato, Pythagoras' (Horton 2011 [1868]: 66). Proponents of racist and race-driven philosophies of history, such as Knox, contended that anti-Black racism was simply a fact of nature that 'has always existed' (Knox 1862: 546). Horton, in drawing on classical sources, is attempting to show that anti-Black racism is not a trans-historical or natural phenomenon. If in classical antiquity Greek and Roman writers did not think of Africans as inferior to themselves, then this shows that the thesis of universal anti-Black antipathy is simply false. This historicization would then open the way to attempting to explain racial antipathy by referring to specific historical developments (e.g., the Atlantic slave trade, the rise of the early modern life sciences, the rise of fixed racial taxonomies, and so on). Horton thus anticipates one of the basic conceptual moves that we associate with contemporary social critiques of racist discourse, namely de-naturalization in favour of historicization.

Horton does not explicitly identify the social forces that brought about anti-Black racism, yet the identification of these forces is a task that historians of philosophy have to carry out if we are to properly understand Horton's own context and explain why was it the case that his arguments against the claims of Knox, Hunt, and Vogt had no impact on his contemporaries.[25] If the same cogent arguments do not receive uptake when they are first formulated, and yet are later received positively when social conditions change, then this would indicate that the determining factor in the reception of the arguments is not their cogency, but rather something else. Greater attention to the manner in which certain social forces impede the reception of cogent arguments against hegemonic beliefs would also help us clarify what it is that we can and cannot accomplish through initiatives aimed at diversifying the philosophical canon through the inclusion of figures like Horton.

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25. For an account of the neglect of Horton, see (Táíwò 2018).

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