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Race and History: Comments from an Epistemological Point of View

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Abstract

The historiography of race is usually framed by two discontinuities: The *invention* of race by European naturalists and anthropologists, marked by Carl Linnaeus's *Systema naturae* (1735); and the *demise* of racial typologies after WWII in favor of population-based studies of human diversity. This framing serves a similar function as the quotation marks that almost invariably surround the term. "Race" is placed outside of rational discourse as a residue of outdated essentialist and hierarchical thinking. I will throw doubt on this underlying assumption, not in order to re-legitimate race, but in order to understand better why race has been, and continues to be, such a politically powerful and explosive concept.

The concept of race is one of the most problematic legacies of the Enlightenment. Most existing historiography on this concept frames its subject by two discontinuities. At the beginning of the story, we have the invention of race by European naturalists and anthropologists, marked by the publication of the book *Systema naturae* in 1735, in which the Swedish naturalist Carl Linnaeus proposed a classification of humankind into four distinct races. At its end stands the demise of race as a viable biological concept after World War II in favor of population-genetic conceptions of human diversity, again prominently marked by the UNESCO Statement on Race issued in 1950. This framing serves a similar function as the quotation marks—"speech act condoms," as Jacques Derrida once called them (Derrida 1995, 473)—that habitually encase the term. As a potential pollutant, race is excluded from proper and rational discourse, and treated as a subject that can only be understood as a residue of long outdated forms of typological and hierarchical thinking, if it can be understood at all.

This conventional perspective on race can explain why there have been relatively few attempts to write a comprehensive history of this concept. To be sure, literature abounds that carries "race" in its title. But mostly in subtitles only, and accompanied by two or more further concepts, which add the substance that the concept of race supposedly lacks. Histories that focus on the race concept alone are rare. Ivan Hannaford's monumental *Race: The History of an Idea in the West* is a useful study that presents the reader immediately with the problem that is probably responsible for the lack of comparable studies. Hannaford considers race as an idea that emerged during the Enlightenment as a consequence of "the insouciant and deliberate manipulation of texts by scientists and historians abandoning

earlier paradigms of descent, generation, and right order” (Hannaford 1996, 6). In a similar vein, Stephen J. Gould has argued in *The Mismeasure of Man*, that the history of physical and psychological anthropology is a history of conscious or subconscious (self-)deception. The two monographic accounts of the history of racial anthropology as a discipline, Nancy Stepan’s *The Idea of Race in Science* (Stepan 1984, 140) and Elazar Barkan’s *The Retreat of Scientific Racism* (Barkan 1992, 10-11) both gain their dramatic tension from the fact that they tell stories of degenerating research programs built on fundamentally mistaken assumptions. And even Michael Banton—whose *Racial Theories* is notable for the subtlety with which it treats race as a highly variable concept that served a whole range of disciplines, including the social sciences—remains wedded to the idea that the history of race can be divided into three phases: a first, during which race had not yet found a systematic place in the scheme of things; a second, when the idea of race as permanent type dominated; and a third, in which this idea was superseded by population genetics (Banton 1998, 4–8).

The history of race is thus mostly told as the history of a *false idea*. To tell the history of a *concept*, however, one also needs to tell the history of the object or phenomenon that the concept encompasses and that shapes the concept in turn. And a concept that is based on a false idea does not have an object, it is empty, as philosophers would put it. In the case of race, this presents historians, sociologists and philosophers of the human sciences with a dilemma. If one accepts the conclusion that race is a concept that builds on fallacious ideas, one faces the difficulty of explaining how a mere delusion or misperception could gain such enormous power over the minds and bodies of many, and thus over the course of history, often with disastrous and outright catastrophic consequences. This horn of the dilemma has been highlighted more recently by historical and sociological studies that show how conceptions of race have continued to play an important though largely submerged role in post-WWII human sciences, and how these conceptions have resurfaced to prominence more recently in the context of genomic studies of human diversity (Pogliano 2005; Reardon 2005). If, on the other hand, one rejects the conclusion that concepts of race simply build on a false idea, and tries to determine the empirical and rational substance that this concept may after all possess (or may have possessed in the past), one is faced with the danger of re-legitimizing racialism—the idea that race reflects some fundamental aspect of reality—in retrospect. Philosophers of science, with their predilection for rational reconstructions, seem particularly prone to endorse this horn of the dilemma and to suggest that race is a legitimate object of scientific research.¹

I believe that one can avoid this dilemma by basing the history of race on an understanding of concepts as mental tools, rather than mental representations. This corresponds to a continental understanding of propositions as judgments, that is, essentially social and political actions, rather than as descriptions of states of affairs as the majority of analytic philosophers would have it. A concept in this understanding does not somehow mirror its object, but rather serves as an anchoring point for evaluations and judgments. The concept does something to its object, and it is meant to do so for a purpose (it “grasps” its object, as

¹See, for example, Andreasen (1998); Gannet (2004) and Gayon (2008) provide pointed critiques of Andreasen’s attempt to base the race concept on phylogeny.

the etymology of the term tells us).² Such a claim, raised in the context of an STS journal, may seem trivial. In *Sorting Things Out*, for example, Geoffrey C. Bowker and Susan Leigh Star have long since argued, that classifications—including racial classifications—should first and foremost be considered as “part of the built information environment” (Bowker and Star 1999, 5). But as far as I can see, important lessons still wait to be drawn from this insight when it comes to the *longue durée* history of the concept of race. Let me offer some examples.

First, and foremost, to understand the concept of race as a tool rather than a representation, will mean that measuring race concepts against their capacity to portray faithfully some presumed reality will often miss the point. Tools do not need to bear any kind of similarity with the object they are supposed to affect. Let me illustrate this point by turning to Linnaeus’s classification of humankind according to skin color (Linnaeus 1735). As mentioned above, this classification is often taken as the starting point of the anthropological study of race (Sloan 1995). Right next to the genus *Homo* and its definition—“Know thyself (*Nosce te ipsum*)”—he presents human diversity in the following, apparently straightforward way as part of the animal kingdom:

Europaeus albesc[ens].

Americanus rubesc[ens].

Asiaticus fuscus.

Africanus nigr[iculus].

A closer look at the abbreviated color terms is worthwhile: in literal translation, Europeans are said to be “whitish,” Americans “reddish,” Asians “tawny,” and Africans “blackish” (translations are my own). The terms are rather vague and broadly applicable, and hence indicate that Linnaeus did not mean to draw sharp distinctions. And indeed, in a discussion of the difference between species and varieties in *Critica botanica* (1737), we find the following statement about the variation of traits in humans:

[God] created one man only, dictates Scripture to us, yet if the slightest trait [difference] was enough, there would easily stick out thousands of different species of man: they display, namely, white, red, black and grey hair; white, rosy, tawny and black faces; straight, stubby, crooked, flattened, and aquiline noses; among them we find giants and pygmies, fat and skinny people, erect, humpy, brittle, and lame people etc. etc. But who with a sane mind would be so frivolous as to call these distinct species? (Linnaeus 1738, 153)

The crucial point in this statement is that Linnaeus aligns skin color and other physical traits with characteristics that vary with diet, environment, and age, or even constitute straightforward malformations. This clearly implies that he was not interested in the identification of discrete and stable types. Instead, the rooting of Linnaeus’s classification scheme in the distinction of four continents is to be taken seriously. It has, in fact, more

²See Canguilhem (1991) for an example of this kind of perspective. Nelson Goodman and Ian Hacking, two prominent analytic philosophers, have adopted a similar perspective on concepts; see their respective contributions to Douglas and Hull (1992). The term “concept” derives from the Latin verb *concipio*, which means “to take or lay hold of”.

similarity with the abstract grid of parallels and meridians that underlies geographical maps, and thus serves as a tool for ordering knowledge, rather than depicting some reality “out there”.

This conclusion is confirmed by the use Linnaeus himself made of his classification. If one looks at subsequent editions of his *Systema naturae*, one can see that the “thin” abstractions of the original scheme served as a matrix for the accretion of further facts.³ On the one hand, Linnaeus correlated skin color with medical temperament—Americans turned out to be “choleric,” Europeans “sanguine,” Asians “melancholic,” and Africans “phlegmatic”—moral characteristics, preferred clothing, and form of government. On the other hand, however, the racial scheme also served to map out variations that did *not* conform to the presupposed scheme of four human races, such as “mountainous (*alpinus*)” people who, as Linnaeus maintains, tend to be “small, agile, and timid,” or European women who artificially constrict their waists (Linnaeus 1766, Vol. 1, 29). The “color lines” that underlie Linnaeus’s racial classification are just that, lines that transect a terrain and provide a grid to map out its irregular and sometimes idiosyncratic contours.

A second lesson needs to be drawn out, once we look at race concepts as tools, rather than representations. Fuzziness and ambiguity should not be treated *a priori* as indications of failure, but rather as properties that can serve a function. Literally, malleability lies at the heart of the productivity of many tools, and sharpness or hardness may, but certainly do not have to belong to their defining qualities. Likewise, concepts can gain their power from being flexible enough to adapt to new contexts and uses. Peter Wade has pointed out in *Race, Nature and Culture* that most historical and sociological studies of race all too readily take for granted that this term is wedded to notions of fixity and indelibility. Yet part of the force of the race concept, as Wade argues convincingly, rather “lies in the ambiguous move between ideas of indelibility and ideas of malleability” (Wade 2002, 38).⁴

It is only recently that cultural historians of science, technology and medicine have begun to provide detailed histories of fundamental biological categories such as heredity (López-Beltrán 2004; Müller-Wille and Rheinberger 2012). Again, Linnaeus can serve as a good example for the complexities one encounters in this exercise. The above quote from *Critica botanica* manifests that Linnaeus did not draw a strict distinction between hereditary and environmental traits. The quoted passage is actually preceded by the suggestion that human races may have evolved through long exposure to various climates. Later on, however, he would sometimes quote variation by skin color in humans as an example for what he termed “constant varieties,” that is, hereditary variations that Linnaeus speculated had arisen from hybridization between different species (Müller-Wille and Orel 2007). Heredity, as this example indicates, was not simply a source of permanence for Linnaeus, but rather a manifestation of nature’s productivity. Linnaeus’s “constant varieties,” it should be noted, are not part of an eternal order, but on the contrary, come about as a consequence of historic events such as migrations into new territories, or past encounters and exchanges. The same

³This can be taken quite literally. Linnaeus used interleaved copies of his own publications as “paper tools” to process information; see Müller-Wille and Charmantier (2012).

⁴For a succinct history of racism that takes its starting point from the idea that this ideology is not simply conservative but defined by its project to create a “racial order” see Frederickson 2002.

is true for the race discourse more generally. From its inception in the early modern period, it tended to conceptualize race within a seemingly contradictory framework of contingent origins and collective destinies (Müller-Wille in press).

The third, and last lesson that understanding the concept of race as a tool teaches us, stands in a certain tension with the two points just made. Tools lead a life of their own, below the radar, so to speak, of explicit discourse. In using them, one does not need to employ reasoning, and more often than not, tools are employed for purposes and reasons that were alien to those who introduced them initially. When Linnaeus and other anthropologists of the eighteenth century, such as Georges Buffon and Johann Friedrich Blumenbach, proposed their racial classifications, they did so on the basis of travel reports from Latin America that contained accounts of a local system of social stratification—known as *las castas*—that had resulted from a transposition of late medieval Iberian “purity of blood” laws in the early sixteenth century and classified colonial subjects, among other things, by racial descent and skin color (Mazzolini 2007). And to this day, racial categories routinely enter the records and forms that are produced in the context of censuses, public surveys, and immigration procedures. The recent resurfacing of race in projects that deal with human genomic diversity is hence not so surprising. Despite claims to the contrary, race was never entirely superseded by population genetics and molecular biology. It persisted all along, albeit redefined, throughout the latter half of the twentieth century (Gannett 2001).

One of the most striking examples of this tendency of race to resurge, even in the high-tech contexts of present-day genomics, is the International HapMap Project. Initially, it set out to study human genomic variation based on four “population samples.” The choice of these samples, however, is revealing. For its pilot study, the HapMap project sought “samples from the Yoruba, Japanese, Chinese and individuals with ancestry from Northern and Western Europe.” This choice was no doubt guided by an underlying classification scheme, which is structurally very similar to that which was originally proposed by Linnaeus in 1735. With the absence of Native Americans, and the curious doubling of the “Asian” component, the choice of samples by the HapMap project also shows, however, how readily such schemes can be adapted to current, geopolitical contexts. Finally, the example of the HapMap project demonstrates just how little explicit theoretical reflection can accompany such decisions, even if they immediately define the very object of the project. The organizers of the HapMap project simply took it for granted that the samples in question would exhaust, in a fair approximation, human variability on a global scale (Gibbs 2003, 791).

If anything, this only emphasizes that race is a historical, rather than strictly physical, category. Over the past centuries, race has gained empirical substance and reality not because people differ by the color of their skin (this is as true as it is trivial), but because race has been applied in countless reiterations to locate and orient oneself and others against a grid outlining differences in genealogical descent, political allegiance, and social and economic status on a global scale. And these differences, of course, are the very elements of human history, not of natural history. I am not claiming that this is a particularly original insight. Hannah Arendt, in her *Origins of Totalitarianism*, as well as Michel Foucault in his lectures at the *Collège de France* from 1975–1976, have gone a long way in retracing the

race concept to discourses revolving around “history,” rather than “nature” (Arendt 1973, ch. 6 and 7; Foucault 2003). With race, differences among humans ceased to form part of a presumed divine and permanent order, and became part and parcel of an epic struggle for domination. Any analysis that misses this ideological thrust of the race concept will fail to understand why it is that this concept can wreak so much havoc.

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References

- Andreasen, Robin O. A new perspective on the race debate. *The British Journal for the Philosophy of Science*. 1998; 49:199–225.
- Arendt, Hannah. *The Origins of Totalitarianism*. New Edition. Harvest Book; San Diego: 1973.
- Banton, Michael. *Racial Theories*. Second edition. Cambridge University Press; Cambridge: 1998.
- Barkan, Elazar. *The Retreat of Scientific Racism: Changing Concepts of Race in Britain and the United States Between the World Wars*. Cambridge University Press; Cambridge: 1992.
- Bowker, Geoffrey C.; Leigh Star, Susan. *Sorting Things Out: Classification and Its Consequences*. The MIT Press; Cambridge, MA: 1999.
- Canguilhem, Georges. *The Normal and the Pathological*. Zone Books; New York, NY: 1991.
- Derrida, Jacques. *Points ...: Interviews, 1974–1994*. Weber, Elisabeth, editor; Kamuf, Peggy, et al., translators. Stanford University Press; Stanford, CA: 1995.
- Douglas, Mary; Hull, David L., editors. *How Classification Works: Nelson Goodman among the Social Sciences*. Edinburgh University Press; Edinburgh: 1992.
- Foucault, Michel. ‘Society Must Be Defended’: Lectures at the Collège De France, 1975–1976. Bertani, Mauro; Fontana, Alessandro, editors; Macey, David, translator. Picador; New York: 2002.
- Frederickson, George M. *Racism: A Short History*. Princeton University Press; Princeton: 2002.
- Gannett, Lisa. Racism and human genome diversity research: The ethical limits of ‘population thinking.’ *Philosophy of Science*. 2001; 68:S479–S492. [PubMed: 15948338]
- Gannett, Lisa. The biological reification of race. *British Journal for the Philosophy of Science*. 2004; 55:323–345.
- Gayon, Jean. Is there a biological concept of race? *NTM – Journal of the History of Science, Technology, and Medicine*. 16:365–370.
- Gibbs, Richard A., et al. The International HapMap Project. *Nature*. 2003; 426:789–796. [PubMed: 14685227]
- Gould, Stephen J. *The Mismeasure of Man*. Norton; New York: 1981.
- Hannaford, Ivan. *Race: The History of an Idea in the West*. Johns Hopkins University Press; Baltimore: 1996.
- Linnaeus, Carl. *Systema Naturae sive Regna Tria Naturae*. Haak; Leiden: 1735.
- Linnaeus, Carl. *Critica Botanica*. Wishoff; Leiden: 1737.
- Linnaeus, Carl. *Systema Naturae Per Regna Tria Naturae*. Twelfth edition. Salvius; Stockholm: 1766. 3 volumes
- López-Beltrán, Carlos. *El sesgo hereditario: Ámbitos históricos del concepto de herencia biológica*. Universidad Nacional Autónoma de México; Mexico City: 2004.
- Mazzolini, Renato G. Las Castas: Inter-racial crossing and social structure (1770–1835). In: Müller-Wille, Staffan; Rheinberger, Hans-Jörg, editors. *Heredity Produced: At the Crossroads of Biology, Politics and Culture, 1500–1870*. The MIT Press; Cambridge, MA: 2007. p. 349–374.

- Müller-Wille, Staffan. Reproducing difference: Race and heredity from a longue durée perspective. In: Lettow, Susanne, editor. *Race, Gender and Reproduction: Philosophy and the Early Life Sciences in Context*. SUNY Press; New York: In press
- Müller-Wille, Staffan; Charmantier, Isabelle. Natural history and information overload: The case of Linnaeus. *Studies in History and Philosophy of Biological and Biomedical Sciences*. 2012; 43:4–15. [PubMed: 22326068]
- Müller-Wille, Staffan; Orel, Vitezslav. From Linnaean Species to Mendelian Factors: Elements of Hybridism, 1751-1870. *Annals of Science*. 2007; 64:171–215.
- Müller-Wille, Staffan; Rheinberger, Hans-Jörg. *A Cultural History of Heredity*. University of Chicago Press; Chicago: 2012.
- Pogliano, Claudio. *L'ossessione della razza: Antropologia e genetica nel xx secolo*. Edizioni della Normale; Pisa: 2005.
- Reardon, Jennifer. *Race to the Finish: Identity and Governance in an Age of Genomics*. Princeton University Press; Princeton: 2005.
- Sloan, Phillip R. The gaze of natural history. In: Fox, Christopher; Porter, Roy; Wokler, Robert, editors. *Inventing Human Science: Eighteenth-Century Domains*. University of California Press; Berkeley etc.: 1995. p. 112-151.
- Stepan, Nancy. *The Idea of Race in Science: Great Britain, 1800–1960*. MacMillan; Houndmills: 1984.
- Wade, Peter. *Race, Nature and Culture*. Pluto Press; London: 2002.