

**‘Curious kinks of the human mind’:  
Cognition, Natural History, and the Concept of Race**

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1. INTRODUCTION

There has been a common presumption in debates surrounding social construction that to catch out some entity or category as so constructed is at the same time to condemn it. Thus Ian Hacking notes that “a primary use of ‘social construction’ is for consciousness raising;” it is “critical of the status quo.” Social constructionists generally move, Hacking argues, from the argument that a given entity or category *X* “need not have existed,” to the view that “[w]e would be much better off if *X* were done away with, or at least radically transformed.”<sup>1</sup> On this line of thinking, every entity or category is expected either to be a real feature of the world, something left over when the world is carved at its joints, or it is to be exposed as constructed and by the same measure to be relegated to the scrap-heap along with phlogiston, the ether, and so on.

But the category of ‘race’ seems to defy this dichotomy. Since the mid-20th century no mainstream scientist has considered race a biologically significant category; no scientist believes any longer that ‘negroid’, ‘caucasoid’ and so on represent real natural kinds, carve nature at its joints, and so on. For several decades it has been well established that there is as much genetic variation between two members of any supposed race, as between two members of supposedly distinct races.<sup>2</sup> And yet the category of race continues to be deployed in a vast number of contexts, and certainly not just by racists,

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<sup>1</sup> Ian Hacking, *The Social Construction of What?*, Cambridge, MA: Harvard University Press, 1999, 6.

<sup>2</sup> See in particular Richard C. Lewontin, “The Apportionment of Human Diversity,” in *Evolutionary Biology* 6 (1972): 381-398.

but by ardent anti-racists as well, and by everyone in between. The history of race, then, is not like the history of phlogiston: an entity that is shown not to exist and that accordingly proceeds to go away. How are we to explain this difference? This is the principal question I would like to consider in the present article.

## 2. RACE AND ETHNICITY

One striking feature of the concept of race in current academic parlance is the evident ambivalence with which it is deployed. Thus for example Anthony Appiah identifies himself as a racial skeptic to the extent that the biological categories to which racial terms refer have been shown not to exist.<sup>3</sup> Yet at the same time he acknowledges that the adoption of ‘racial identities’ may often be socially expedient, and even unavoidable, for members of perceived racial minorities.<sup>4</sup> Ron Mallon has in turn distinguished between metaphysical views of race on the one hand and normative views on the other, dividing the latter into ‘eliminativist’ and ‘conservationist’ camps.<sup>5</sup> On his scheme, one may very well coherently remain metaphysically anti-realist about race but still defend the conservation of the concept on normative grounds.

Here I am principally interested in what Mallon would call the metaphysical question of race, yet there is cause for some passing concern about the distinction: under any circumstances where we know our concepts do not match up with the world, we must

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<sup>3</sup> K. Anthony Appiah, "The Uncompleted Argument: DuBois and the Illusion of Race," in L. Bell and D. Blumenfeld (eds.), *Overcoming Racism and Sexism*, Lanham, MD: Rowman and Littlefield, 1995.

<sup>4</sup> K. Anthony Appiah, "Race, Culture, Identity: Misunderstood Connections," in Anthony Appiah and Amy Gutmann (eds.), *Color Conscious*, Princeton: Princeton University Press, 1996.

<sup>5</sup> See Ron Mallon, "Race: Normative, Not Metaphysical or Semantic," *Ethics* 116, 3 (2006): 525-551.

have strong grounds for wishing to hold onto them anyway; and this is so *a fortiori* when, as in the case of race, there appear to be at least a few perfectly adequate, coextensive terms -- ‘ethnie’, ‘culture’, ‘ethnocultural group’-- that unlike ‘race’ could not be taken to imply any false metaphysical or scientific commitments on the part of the person who deploys them. Why not then trade the social expediency of ‘racial identities’ for cultural ones?

Ambivalence about race, of the sort we see in Appiah, extends far beyond individual opinions and into the actual practice of demography. As has often been noted, there are ample historical examples demonstrating that what counts as a race in one region or era might not count in a different cultural and historical setting: it would be absurd to find the US Census Bureau distinguishing between the Aryan and Celtic races, yet, as Edouard Machery and Luc Faucher point out, just such a distinction was a paradigm case of racial difference in 19th-century Germany.<sup>6</sup> In view of this historical fact, the US Census Bureau’s list of human subgroups may easily appear as a sort of repository for scattered historical leftovers, categories of person that somehow did not, in this regional setting, cease to be perceived as races in the same way that, say, Celts did: ‘Black or African-American’, ‘Native Hawaiian or Other Pacific Islander’, ‘Asian’, and so on. In addition, there is on the bureau’s list, as of the 2010 census, the category ‘Hispanic, Latino or Spanish origin’, of which it is explained that this is not a ‘race’ but only an ‘ethnicity’.

The bureau is at great pains to emphasize that race is “not primarily biological or genetic in reference,” that it is not even ‘scientific’, but instead is based on “social and cultural characteristics as well as ancestry.” How then could this be different from the ‘ethnicity’ of a Latino? There does not seem to be any explanation, and one can only assume that the distinction is a concession to the self-conception of Latin Americans, who do not think of themselves as sharing a single ‘race’, since after all there are many fine-grained racial distinctions within Latin America which are often similar but not identical to those made

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<sup>6</sup> Edouard Machery and Luc Faucher, “Social Construction and the Concept of Race,” in *Philosophy of Science* 72 (December, 2005): 1208-1219.

in the United States. Brazil is perhaps the best known case, in large part because of the significant role of slavery in Brazilian history, and the consequent legislation to control ‘miscegenation’. The US Census Bureau is in effect forced by the self-conceptions of the different identity groups that make up the US population to make a distinction between the sociocultural-linguistic category of ethnicity, on the one hand, and the --one would think-- biological-essential category of race on the other. Yet at the same time it is forced by science to acknowledge that there is no meaningful distinction between ethnicity and race. This, as we will see, is very similar to the predicament in which Johann Friedrich Blumenbach, generally acknowledged as the founder of the science of racial typology, found himself already in the late 18<sup>th</sup> century.

I have already suggested that ‘race’ might be suitably replaced by ‘ethnie’, a term whose denotation is coextensive with the term it replaces, yet without implying any essentialistic or biological theory of the groups it picks out. But what is an ethnie? One way to go about knowing a thing, as Aristotle noted, is by considering how it comes to be, so let us try that route. Recent scholarship has suggested that ethnogenesis almost as a rule occurs through elective confederation, generally for military purposes; even the purest nations are in fact creole in their roots. To cite a well-known example: the Germanic tribe known as the Allemans (whence the current French word for ‘German’: *allemand*), is simply the transformation into an ethnonym of what was initially a description; to put it in modern German: *alle Männer*. As Herwig Wolfram argues, our modern conception of an ethnie, a *gens*, or a nation is one that derives entirely from the concept of nationhood that was created at the time of the French Revolution.<sup>7</sup> These terms tend to refer to a community

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<sup>7</sup> Herwig Wolfram, *Geschichte der Goten: von den Anfängen bis zur Mitte des 6. Jahrhunderts*, Munich: Beck, 1979; trans. as *History of the Goths*, tr. Thomas J. Dunlap, Berkeley: University of California Press, 1988, 5. For a recent, evolutionary approach to ethnogenesis, see, e.g., Peter J. Richardson and Robert Boyd, “The Evolution of Subjective Commitment to Groups: A Tribal Instincts Hypothesis,” in Randolph M. Nesse (ed.), *The Evolution of Subjective Commitment*, New York: Sage Foundation, 2001, 186-220.

that is at least supposed to be of shared biological descent. Wolfram notes however that in the tribal sagas of the peoples he studies, the Goths, *people* is equated with *army*, and to this extent:

the sources attest the polyethnic character of the *gentes*. These *gentes* never comprise all potential members of a *gens* but are instead always mixed. Therefore their formation is not a matter of common descent but one of political decision... Whoever acknowledges the tribal tradition, either by being born into it or by being 'admitted' to it, is part of the *gens* and as such a member of a community of 'descent through tradition'.<sup>8</sup>

This account of the ethnogenesis of the ancient Germans could with some adjustments be compared, for example, to the formation of the identity of dustbowl 'Okie' migrants to the West of the United States, who tended to come from a similar background (Scotch-Irish) and shared many of the same traits both phenotypic and cultural, yet could also easily absorb people of different ethnic backgrounds (as long as they were not so far as to be perceived as non-white). Okies did not make it onto the census forms, though at least one California university floated the idea of creating an 'Okie Studies' program, which would perhaps have served towards the reification of this borderline ethnue.<sup>9</sup> We know moreover of at least one Amazonian ethnue that reproduces itself from one generation to the next not principally through biological reproduction but rather through adoption (or, to be more precise, kidnapping).<sup>10</sup> All this to say that not only ethnogenesis but even, so to speak, ethnostasis, need not necessarily be undergirded by the mutual genetic proximity of the members of an ethnue.

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<sup>8</sup> Ibid.

<sup>9</sup> See Roxanne Dunbar-Ortiz, "One or Two Things I Know about Us: Rethinking the Image and Role of the 'Okie'," in *Monthly Review* 54, 3 (2002): 4-34.

<sup>10</sup> See Maurice Godelier, *Métamorphoses de la parenté*, Paris: Fayard, 2004.

Ethnies, then, are plainly not ‘races’ in a biological sense, even if what people often have in mind when they speak of ‘race’ is in fact an ethnies. Given, then, that we now know that the identity groups in modern multicultural states are plainly constituted on ethno-linguistic and cultural grounds, rather than on biological-essential grounds, why, again, do so many people remain normatively committed to racial identities? Sometimes of course it *does* happen that the removal of a social kind's natural undergirding in turn causes that category to largely wither away. Thus at least in the European cultural sphere the category of ‘witch’, surely a social kind and not a natural one, has, like phlogiston, largely withered away as a result of broad convergence by the 18th century upon the view that the term has no referent in the world. So, again, if witches can go the same way as phlogiston, why not race?

The answer to this question will require us to turn both to history as well as to some very recent scientific literature on racial categorizations. In the following section, before moving on to a consideration of the early modern emergence of racial science, I will turn to the recent work in cognitive science of Francisco Gil-White,<sup>11</sup> Machery and Faucher,<sup>12</sup> and others, who have argued that the categorization of human subgroups is grounded in a natural disposition of the human mind.<sup>13</sup> On this account, we are cognitively predisposed

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<sup>11</sup> See in particular Francisco Gil-White, “Are Ethnic Groups Biological ‘Species’ to the Human Brain?: Essentialism in our Cognition of Some Social Categories,” in *Current Anthropology* 42, 4 (2001): 515-554; Francisco Gil-White, “The Cognition of Ethnicity: Native Category Systems under the Field-Experimental Microscope,” in *Field Methods* 14, 2 (2002): 170-198.

<sup>12</sup> In addition to the article cited above, see Edouard Machery and Luc Faucher, “Why Do We Think Racially? Culture, Evolution and Cognition,” in Henri Cohen and Claire Lefebvre (eds.), *Categorization in Cognitive Science*, Amsterdam: Elsevier, 2005, 1009-1033; Luc Faucher and Edouard Machery, “Racism,” in *Philosophy of the Social Sciences* 39, 1 (2009): 41-62.

<sup>13</sup> For other influential work on the question of racial perception from a cognitive or evolutionary point of view, see D. E. Brown, “Ethnicity and Ethnocentrism: Are They

to perceive differences between biological kinds as rooted in something essential. In many respects, the way was paved for this approach to race by the earlier work of Brent Berlin,<sup>14</sup> Scott Atran,<sup>15</sup> and others, who sought a cognitive basis for prescientific folk taxonomies of the biological world. Atran in particular has argued that what would eventually come to be called ‘biology’ emerged out of a conception of the natural world fundamentally based on the attributions of essences to different sorts of natural being. Correlatively, as I will argue in sections 4 and 5, the emergence of ‘racial science’, more or less on the heels of modern biological taxonomy in 17<sup>th</sup> and 18<sup>th</sup> centuries, may be seen as an outgrowth of a related cognitive disposition to subdivide the human world into distinct groups with essential or species-like properties.

The cognitive approach supposes that it is insufficient to distinguish simply between metaphysical and normative deployments of a concept such as race. We must also investigate whether it is not a natural feature of human cognition. We might decry the essentialization of ethnic difference, yet, as W. E. B. Du Bois noted, “it remains a heavy fact. Such curious kinks of the human mind exist and must be reckoned with soberly.”<sup>16</sup>

### 3. THE COGNITIVE TURN: SPECIES, RACE, AND ESSENCE

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Natural?" in Raymond Scupin (ed.), *Race and Ethnicity: An Anthropological Focus on the United States and the World*, Upper Saddle River, NJ: Prentice Hall, 2003; Ryan A. Brown, and George J. Armelago, “Apportionment of Racial Diversity: A Review,” in *Evolutionary Anthropology* 10 (2001): 34-40; Leda Cosmides, John Tooby, and Robert Kurzban, “Perceptions of Race,” in *Trends in Cognitive Science* 7 (2003): 173-179.

<sup>14</sup> Brent Berlin, *Ethnobiological Classification: Principles of Categorization of Plants and Animals in Traditional Societies*, Princeton: Princeton University Press, 1992.

<sup>15</sup> Scott Atran, *The Cognitive Foundations of Natural History: Towards an Anthropology of Science*, Cambridge: Cambridge University Press, 1991. See also Douglas Medin and Scott Atran (eds.), *Folkbiology*, Cambridge, MA: MIT Press, 1999.

<sup>16</sup> W. E. B. Du Bois, *The Souls of Black Folk*, New York: Bantam, 1989 [1903], 67-8.

One of the broad implications of recent research in cognitive science has been that, even if something might not be real, there might be good reasons why we tend to act as though it is. The study of these good reasons amounts to a study of the foundations of what Atran has called ‘the anthropology of science’. What is this has in mind is this: assuming the correctness (or at least fruitfulness) of Chomsky’s view that “each fundamental type of human knowledge arises from a specialized cognitive aptitude,” then science, “which is patently different from other forms of human knowledge, should also be innately grounded in some special ‘science forming faculty’.”<sup>17</sup> This, so far, is a paradox, but one that largely disappears when we recognize that “cognitive maturation [does not] necessarily proceed in the direction of scientific reasoning,” and that the ordinary range of our experiences of the world “remain structurally stable and adequate for dealing with the phenomenal world of ordinary human experience.”<sup>18</sup> Atran proposes to illustrate this claim by studying folk knowledge of living kinds, in order to determine to what extent such knowledge is continuous with the systems of scientific taxonomy that would emerge over the course of the 15th-18th centuries. His conclusion is that while there is in fact no specific ‘science-forming faculty’ of the human mind, nonetheless “certain sciences seem fitted to specific common-sense domains.”<sup>19</sup> The science of biological classification, in particular, “emerged as an elaboration of universal cognitive schema (*sic*) common to all and only folkbiological taxonomies.”<sup>20</sup>

Following Atran’s lead, more recent scholars have turned their attention from the folk-science of biological taxonomy to that of racial science. Some have asked, moreover, whether the innate cognitive schema responsible for making racial distinctions is not the same as, or at least does not work according to the same assumptions as, the one for biological species. One (somewhat controversial) study, by the anthropologist Francisco

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<sup>17</sup> Scott Atran, *The Cognitive Foundations of Natural History: Towards an Anthropology of Science*, Cambridge: Cambridge University Press, 1991, x.

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

<sup>20</sup> Ibid.

Gil-White, has argued that the tendency to essentialize ethnic difference, that is, to perceive different human groups as if they were divided up into real natural kinds, may be an innate feature of the human mind. Gil-White has also shown that “categorization into two different ethnies biases people’s expectations of phenotypic differences, and also that ‘racial’ phenotypic differences may not be necessary for essentialism.”<sup>21</sup> That is, remarkably, the perception of ‘racial’ as opposed to ethnic difference is not necessarily a bare response to visible properties of another person; it is sooner a *consequence* of the prior supposition of essential difference.

In most of the social-constructionist literature, there has been a tendency to move from the idea of construction to that of invention: that is, to suppose that because race does not really exist, it must have been actively brought into existence by human design. On the cognitive view, this tendency is misguided, since, to speak with Machery and Faucher, *bad* folk science may in fact be *good* epistemology,<sup>22</sup> and there may indeed be compelling reasons why in traditional social environments human beings have tended to essentialize their own group’s distinctness from other groups. In fact, Machery and Faucher have identified a number of salient properties that ethnies do in fact have in common with species. In particular, “coethnics have a distinctive morphology (dress etc.), coethnics behave in a characteristic way, ethnic membership is based on descent, and reproduction is endogamous.”<sup>23</sup> Machery and Faucher thus speculate that there may be “an evolved, canalized disposition to think about ethnies in a biological way.”<sup>24</sup> Thus with race we are

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<sup>21</sup> Francisco Gil-White, "The Cognition of Ethnicity: Native Category Systems under the Field-Experimental Microscope," in *Field Methods* 14, 2 (2002): 170-198.

<sup>22</sup> Edouard Machery and Luc Faucher, “Social Construction and the Concept of Race,” in *Philosophy of Science* 72 (December, 2005): 1208-1219. See also Edouard Machery and Luc Faucher, “Why Do We Think Racially? Culture, Evolution and Cognition,” in Henri Cohen and Claire Lefebvre (eds.), *Categorization in Cognitive Science*, Amsterdam: Elsevier, 2005, 1009-1033.

<sup>23</sup> Machery and Faucher, “Social Construction and the Concept of Race,” 1212.

<sup>24</sup> *Ibid*, 1210-11.

dealing with the seemingly paradoxical case of what might be called a *natural construction*. Naturally constructed, we might say, are those entities or categories that have no exact referent in the world, but that do not fade away when human inquiry establishes as much. They linger because of a natural propensity of the human mind to organize the world by means of them.

If the evidence that race is naturally constructed is only now beginning to accumulate, it is worth reminding, at this point, that we already have a tremendous amount of evidence, and a somewhat longer trail of scientific literature, suggesting that a number of the familiar categories of human perception of the natural world are indeed constructed in a similar way. Species, in particular, have been shown by science not to be at all what they seem in our ordinary way of thinking about them. Certainly, within the philosophy of biology there is a tremendous diversity of viewpoints as to their ontological status, though many today believe that they are not so much classes or sets as they are scattered individuals or homeostatic property clusters, or some such thing that is much more concrete than abstract, much more like a thing than like a kind.<sup>25</sup> And it is most certainly correct to say in light of evolution that species are not fixed natural kinds, but rather

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<sup>25</sup> The 'species as individuals' thesis has been most forcefully defended, separately, by David Hull and Michael Ghiselin. See in particular Hull, "A Matter of Individuality," in *Philosophy of Science* 45 (1978): 335-360; Ghiselin, "A Radical Solution to the Species Problem," in *Systematic Zoology* 23 (1974): 536-544. Serious doubts have been raised about this approach, however. Philip Kitcher, in particular, provides a modified defense of the natural-kinds view of species. See Kitcher, "Species," in *Philosophy of Science* 51 (1984): 308-333. For more recent contributions to the debate, see in particular Ruth Millikan, "Historical Kinds and the 'Special Sciences'," in *Philosophical Studies* 95 (1999): 45-65; Robert Wilson, "Realism, Essence, and Kind: Resuscitating Species Essentialism?," in R. Wilson (ed.), *Species: New Interdisciplinary Studies*, Cambridge, MA: The MIT Press; Marc Ereshefsky and Mohan Matthen, "Taxonomy, Polymorphism, and History: An Introduction to Population Structure Theory," in *Philosophy of Science* 72 (2005): 1-21.

momentary representatives of lineages which include, if one goes far enough back, organisms that are not members of the same species. Nonetheless, those of us who have studied biology as well as the ‘folk’ appear universally to suppose in our ordinary lives that a species is a really existing kind of thing, with multiple instantiations. These individual time-slices of lineages are biologically significant, unlike race, but this does nothing to diminish the force of the observation that, much like race, species, even if we *know* what they are, aren't what we (ordinarily) *think* they are.

Atran has compellingly argued that there is a deep history of cognizing the natural world through its most ‘phenomenally salient’ elements, particularly plants and animals. “[O]ur universally held conception of the living world,” he writes, “is both historically prior to, and psychologically necessary for, any scientific --or symbolic-- elaboration of that world.”<sup>26</sup> Now cognitive science is often faulted for playing fast and loose with speculations about the past,<sup>27</sup> particularly about human prehistory, and indeed the trained historian is right to ask what is really at stake in claims of historical priority of the sort Atran is making. Historians, particularly wary of anachronism, will want to know whether Atran’s claim amounts to saying that Aristotle's distinction between a shark and a cuttlefish, say, was a *biological* distinction, even if the Greek natural philosopher himself lacked such a term. If we see Aristotle's study of animals as based on the same cognitive aptitudes out of which Linnean taxonomy would later emerge, then the answer would seem to be ‘yes’ and ‘no’ at once. ‘No’, to the extent that there was no such thing as biology; but ‘yes’, to the extent that the entities he was picking out, *and the features of these entities that were of interest to him*, are the same as those that we today call ‘biological’.

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<sup>26</sup> Scott Atran, *The Cognitive Foundations of Natural History: Towards an Anthropology of Science*, Cambridge: Cambridge University Press, 1991, 13.

<sup>27</sup> Thus for example Steven Rose, in the course of expressing partial agreement with Jerry Fodor's controversial take on the theory of natural selection, derides what he sees as ‘Flintstone evolutionary psychology’. See his Letter to the Editor, *London Review of Books* 29, No. 21 (2007).

And so, perhaps, with race: the features that were picked out in antiquity as phenomenally salient in other groups were the same as those we would pick out as ‘racial’: a mixture of supposedly physiological features, together with invisible, ‘essential’ features of which the physiological ones are thought to be signs. Again and of course, race, unlike species, has turned out to be biologically insignificant. And yet this point of disanalogy should not cause us to abandon altogether the thought of a parallel history of the biological and the racial. For again, distinctions that are not about something real are not for that reason not real distinctions, and if we take the idea of a cognitive turn in the concept of race seriously, then whether the distinctions pick out something real is of little concern.

Atran believes that by the 19th century scientific taxonomy properly speaking had broken away from the folk-rooted tradition of natural history, and that, as a result, “natural history’s common-sense preoccupation with comprehending phenomenal reality gave way to biology’s quest to explain the unforeseen.”<sup>28</sup> Yet if the extension of the cognitive turn from living kinds to human kinds is justified, it appears, as we will see, that natural-historical thinking in the latter domain held out somewhat longer. Even as new, more sophisticated questions came to be asked about biological taxa, the older natural-historical project was still well underway with regard to human subtypes, and this *even though* some of the practitioners of this late branch of natural history sensed that the phenomenal reality that they were describing with their racial typologies had no place in the emerging, speculative science of biology, which was centered around “a dynamic reassessment of the relation between species and higher-order taxa in terms of biological functions, anatomical structures and historical processes.”<sup>29</sup> Nowhere is this discrepancy clearer, between the newly emerging science of biology on the one hand and the mere natural-historical description of phenomenal reality characteristic of racial science on the other, than in the work of Johann Friedrich Blumenbach, as we will see.

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<sup>28</sup> Atran, *The Cognitive Foundations of Natural History*, 10.

<sup>29</sup> *Ibid.*

Machery and Faucher have emphasized the importance of bringing together the literature on social construction with the new cognitive-evolutionary approach they are developing, and this will surely be fruitful. But one might add that another approach that might supplement these newly unified strands is the historical one: which might either falsify or support the hypothesis of an evolved disposition to carve up the human species into essentialized ethnies or ‘races’. Like data from psychological studies of infants<sup>30</sup> or from cross-cultural fieldwork such as Gil-White's, the study of different historical periods in order to determine what remains stable and what changes in the way the concept of ‘race’ is deployed can itself play an important role in the discussion. This much has already been shown in a parallel but related area: Scott Atran’s two-fold approach to the problem of biological taxonomy, which he treats both historically (based on Western sources), and ethnographically (based on comparative fieldwork. Here we will be contributing only to the first sort of approach (confident that the other is in good hands).

Such a contribution, is important, since one widespread view in recent years has held that race is not just a construction, but indeed is a distinctly *modern* construction, and if this is in fact so then the case for a cognitive-evolutionary approach to race is significantly weakened. Many suppose that ‘race’ as a social category is simply coterminous with the spread of racial typologies in the 19<sup>th</sup> century.<sup>31</sup> Other scholars date the invention of race to the early modern period, roughly contemporaneously with the rise of the trans-Atlantic slave trade.<sup>32</sup> In general, scholarly work that is placed under the banner of ‘post-colonial

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<sup>30</sup> See in particular Lawrence Hirschfeld, *Race in the Making: Cognition, Culture, and the Child's Construction of Human Kinds*, Cambridge, MA: The MIT Press, 1998.

<sup>31</sup> See, e.g., Michael Banton, “The Concept of Racism,” in Sami Zubaida (ed.), *Race and Racism*, London: Tavistock, 1970, 17-34.

<sup>32</sup> Some historians have however argued more recently that there is nothing all that unique about the way different human subgroups come to be carved up in the modern period See David M. Goldenberg, *The Curse of Ham: Race and Slavery in Early Judaism, Christianity, and Islam*, Princeton: Princeton University Press, 2003.

theory' supposes that in some way or other racial thinking is a part of the legacy of modern European colonialism.<sup>33</sup> Are these scholars correct? Or does the modern concept of race supervene upon a deep history, as old as humanity itself, of thinking of other human groups as essentially --or, as it would later be put, 'biologically'-- different? The best way to answer this question is to turn, though here we can only do so in the barest of outlines, to the historical record.

#### 4. FROM ETHNOCENTRISM TO RACIAL SCIENCE

Prior to the supposedly modern invention of race, human beings may have practiced what could be called, on analogy to 'folk taxonomy', 'folk racial science': making distinctions between different groups, implicitly rooted in essences and indexed to perceived physiological traits, but without any explicit theory of the root causes of these distinctions. The early Greek historian and ethnographer Herodotus provides a good example of this. His distinctions blend the racial, the linguistic, and the cultural without any concern to keep these separate. Thus for example in describing the various peoples of Scythia, he writes:

The Budinians... differ from the Gelonians in both language and lifestyle. The Budinians, who are nomadic, are the indigenous inhabitants of the country, and they are the only race there to eat lice, whereas the Gelonians are farmers, grain-eaters, and gardeners; moreover, the two sets of people are altogether dissimilar in appearance and coloring.<sup>34</sup>

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<sup>33</sup> See most notably Gayatri Chakravorty Spivak, *A Critique of Postcolonial Reason: Towards a History of the Vanishing Present*, Cambridge, MA: Harvard University Press, 1999.

<sup>34</sup> Herodotus, *The Histories*, tr. Robin Waterfield, Oxford University Press, 1998, 109 [270].

In Tacitus, some centuries later, we see a remarkable attempt to root physiological features --in the event, the much-vaunted robustness of the Germans-- in cultural practices:

In every house the children grow up, thinly and meanly clad, to that bulk of body and limb which we behold with wonder. Every mother suckles her own children, and does not deliver them into the hands of servants and nurses. No indulgence distinguishes the young master from the slave. They lie together amidst the same cattle, upon the same ground, till age separates, and valor marks out, the free-born. The youths partake late of the pleasures of love, and hence pass the age of puberty unexhausted: nor are the virgins hurried into marriage; the same maturity, the same full growth is required: the sexes unite equally matched and robust; and the children inherit the vigor of their parents.<sup>35</sup>

Both Herodotus and Tacitus are writing in a vein that perhaps has its earliest expression in the Hippocratic treatise *Airs, Waters, Places*, which describes the relationship of populations to their natural environments, as well as the way these environments shape them physically and psychologically, but generally with an eye to answering questions in the domain of what we would consider physical geography rather than physical anthropology (though as late as Kant we see very clearly that the question of 'race' could in the modern period still at times be included under the banner of geography).<sup>36</sup>

What is admittedly distinctive about the modern period is that racial difference, while it is still seen as heavily influenced by climate and environment, comes increasingly to be described in terms that duplicate the system of differences being worked out simultaneously in the field of biological taxonomy. It is difficult, however, to identify the

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<sup>35</sup> C. Cornelius Tacitus, *A Treatise on the Situation, Manners and Inhabitants of Germany*, ed. and tr. John Aikin, Oxford: W. Baxter, 1823, 54.

<sup>36</sup> See Immanuel Kant, *Physische Geographie*, ed. Paul Gedan, Third Edition, Leipzig: Meiner, 1922.

precise moment at which this new emphasis emerges. Many writers have pin-pointed the appearance of properly racialist typology of human groups to the late 17th century, or more precisely still in the work of François Bernier. Bernasconi and Lott, for example, write that "although many European travelers before Bernier noted the different physical characteristics of the various peoples they encountered, especially their skin color, he was the first to group these peoples specifically into 'races' on that basis. For this reason, 'A New Division of the Earth' can be described as the first text in which the term 'race' is used in something like its modern sense to refer to discrete human groups."<sup>37</sup> This attribution becomes even more solidified in subsequent historical overviews, into not only a terminological innovation but indeed a conceptual one. Thus in the *Stanford Encyclopedia of Philosophy* entry on 'Race' we read that "[w]hile events in the Iberian peninsula may have provided the initial stirrings of proto-racial sentiments, the philosophical concept of race did not actually emerge in its present form until the 1684 publication of 'A New Division of the Earth' by Francois Bernier."<sup>38</sup> How we can get from the terminological innovation to the conceptual one is not at all clear, and certainly there's little evidence of any interest in developing 'race' as a concept in Bernier's text.

By his own lights, Bernier's work is novel in that it seeks to find a small number of basic human types, rather than simply an innumerable list of differences in facial and bodily traits from one canton to the next. "For although in the exterior form of the body," he explains,

and particularly of the face, men are almost all different from one another, depending upon the cantons of the earth in which they live, so that those who have travelled a great deal can often distinguish in this way, without mistake, each nation in particular, I have nevertheless remarked that there are above all four or

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<sup>37</sup> Robert Bernasconi and Tommy L. Lott (eds.), *The Idea of Race*, Indianapolis: Hackett Publishing Company, 2000, 1.

<sup>38</sup> Michael James, "Race," *The Stanford Encyclopedia of Philosophy* (Fall 2008 Edition), Edward N. Zalta (ed.), URL = <<http://plato.stanford.edu/archives/fall2008/entries/race/>>.

five Species or Races of men, whose difference is so great that it could serve as a good foundation for a new division of the world.<sup>39</sup>

Bernier includes within one and the same race all of the people of Europe, together with all of the peoples of the places in which he has travelled most extensively, particularly Persia and “the states of the great Moghul,”<sup>40</sup> as well as the people of “Siam, Sumatra, Bantan, and Borneo.” Bernier believes that, although the people in some of these regions have a very different skin color than do Europeans, “this color is however only accidental to them, and occurs only because they are exposed to the sun.” Those among them who are not required to expose themselves to the sun “are not much more black than many Spaniards.”<sup>41</sup> Bernier concedes that many Indians “have something quite different from us in the conformation of the face, and in their color, which approaches to yellow.”<sup>42</sup> But he says that if this is enough “to make of them a particular species,” then “it would be necessary to make one of the Spanish as well, another of the Germans, and similarly for some other peoples of Europe.”<sup>43</sup> Clearly, even if there was a perception of physical differences between national groups, they did not at all match many of the stereotypes that would emerge by the 19th century (in particular, the core doctrine of Romantic ‘Aryanism’, which takes Germans as the representatives *par excellence* of the European racial type).

After enumerating three more races --the blacks ‘of all of Africa, besides the coasts’;<sup>44</sup> the ‘Asians’ of certain parts of east Asia, but excluding the parts mentioned above, and

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<sup>39</sup> François Bernier, “Nouvelle division de la terre, par les differentes Especies ou Races d'hommes qui l'habitent, envoyée par un fameux Voyageur à M. l'Abbé de la \*\*\*\*\* à peu près en ces termes,” *Journal des sçavans* (24 April, 1684): 133-140, p. 133.

<sup>40</sup> Ibid, 134.

<sup>41</sup> Ibid.

<sup>42</sup> Ibid.

<sup>43</sup> Ibid, 134-5.

<sup>44</sup> Ibid, 135.

including parts of ‘Muscovy’;<sup>45</sup> and finally, the bear-like ‘Lapps’ of northern Scandinavia, who are by far the lowest on the implied scale of value<sup>46</sup>-- Bernier spends the rest of his treatise comparing the relative beauty of women from different regions of the world (he praises Circassian slave women most highly). All in all, the treatise barely makes a foray into what would look like racial taxonomy in the 18th-century sense, before veering into the tall tales of a voyager and adventurer.

To the extent that there is a ‘theory’ of race in Bernier at all, it is rather plainly the case that he is interested in extending a term that was already familiar in everyday French as the word for ‘breed’, as in a breed of pigeon, horse, or dog. Just as no early modern pigeon breeder would have supposed that there were ‘essential’ differences between different subpopulations of pigeon, indeed had to suppose that there could not be, in view of the descent of all pigeons from two original parents brought into existence at the Creation, so too would anyone who chose to use the word ‘race’ to describe human beings not have been attempting to imply any more essential or biological, species-like differences between human subgroups than had been supposed prior to the term's extension. If anything, by reducing the difference between Africans and Europeans to one akin to that between breeds of domestic animals, an early modern author would have sooner been understood to be downplaying the differences, and to be committing himself to the changeability or reversibility of any given human population's physiological and 'temperamental' traits through change of climate and diet or through interbreeding.

A final point about the miscasting of Bernier as the ‘inventor’ of the modern race concept: not only is the terminological novelty not a conceptual novelty (or at least not in the way it's been held to be); it is not even a terminological one. There are plenty of texts prior to 1684 that use some local variant of ‘race’ to describe human subgroups. To cite just one: in a note on a text by Wilkins most likely from around 1677, Leibniz identifies the terms *Race*, *genus*, and *Geschlecht* as synonyms, and defines them all as 'a

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<sup>45</sup> Ibid, 136.

<sup>46</sup> Ibid, 136.

generational series [*series generationum*]."<sup>47</sup> And some years earlier, in a proposal to Louis XIV for the colonization of Madagascar, written in 1671, Leibniz mentions the "Ethiopians, Nigritians, Caribbeans, ... and Hurons," describing all of these as various *genera*. Thus the somewhat later appearance of the word 'race' in Leibniz stems from the fact that it is only towards the middle of his career that he began writing in French; and we can hardly expect him to be using any cognate of 'race', a word that is not of Latin origin, when he is writing in Latin! 'Race' had to wait to make its appearance not so much for the emergence of a distinctly modern conception of human difference, as it did simply for the vernacularization of European scholarly print culture. And once this started happening, Bernier was not the first on the scene.

These last points might seem overly punctilious, but they are motivated by a concern to forestall any construction of a 'myth of origins' for the modern race concept. No one invented race. The term is continuous with the long familiar usage of *genus* in Latin, as it refers to people, and it is already quite familiar in French as a term for describing breeds of domestic animals. When Bernier comes to use the term to describe human beings, what is most novel is not that he is dividing the human species into subtypes, but that he purports to be able to do so on an exhaustive, global scale.

What would truly set modern racial science in motion, however, was another aspect of early modern globalization, namely, the increased exposure to non-human higher primates, which served to intensify debates in Europe about the lower boundary of humanity, and about possible gradations within humanity. The watershed moment for this new development can in fact be pin-pointed very easily, to the anatomical study that Edward Tyson performed on an infant chimpanzee in London in 1698, and the publication a year later of his findings.<sup>48</sup>

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<sup>47</sup> G. W. Leibniz, *Sämtliche Schriften und Briefe*, ed. Deutsche Akademie der Wissenschaften, Berlin and Darmstadt, 1923-present, Series VI, Vol. iv, 30-34.

<sup>48</sup> Edward Tyson, *Orang-outang, sive, Homo sylvestris, or, The anatomy of a pygmie compared with that of a monkey, an ape, and a man to which is added, A philological*

For Tyson there is so much evidence for human-ape kinship that in the end the only way he is able to secure this fundamental difference, while acknowledging physiological similarities, is by locating human uniqueness in something altogether unconnected to physiology:

The Organs in Animal Bodies are only a regular Compages of Pipes and Vessels, for the Fluids to pass through, and are passive. What actuates them, are the Humours and Fluids: and Animal Life consists in their due and regular motion in this Organical Body. But those Nobler Faculties in the Mind of Man, must certainly have a higher Principle; and Matter organized could never produce them; for why else, where the Organ is the same, should not the Actions be the same too? and if all depended on the Organ, not only our Pygmie, but other Brutes likewise, would be too near akin to us [...] In truth Man is part a Brute, part an Angel; and is that Link in the Creation, that joyns them both together.<sup>49</sup>

It is not, then, the ape that is of a ‘middle nature’ between the rational and the animal, for that notch in the scale of being is occupied by man himself. Rather, the ape is a brute *sui generis*, it is wholly a brute, but one that is remarkably able to simulate, both in its inward parts and in its behaviour, the ensouled human being. Tyson tellingly says that in its physical resemblance to humans, and not just in its learned behavior, the “the Orang-Outang imitates a Man.”<sup>50</sup>

Now Tyson was not explicitly interested in the subvarieties of human being: other than to insist emphatically that his ‘orang-outang’ was not one. But the appearance of the orang-

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*essay concerning the pygmies, the cynocephali, the satyrs and sphinges of the ancients: wherein it will appear that they are all either apes or monkeys, and not men, as formerly pretended*, London: Thomas Bennet and Daniel Brown, 1699.

<sup>49</sup> Tyson, *Orang-Outang*, 54f.

<sup>50</sup> *Ibid*, Preface, no page numbers.

outang on the European scene would have a profound impact on debates about the possibility of divisions within the human species, and also the possibility of gradations: relative proximity or distance to our non-human simian ‘imitators’. Eight years before Tyson’s study, John Locke had claimed in his *Essay concerning Human Understanding* of 1680, in the course of buttressing his species nominalism, that

There are creatures in the world that have shapes like ours, but are hairy, and want language and reason. There are naturals amongs us that have perfectly our shape, but want reason, and some of them language too. There are creatures, as it is said... that, with language and reason, have hairy tails; others where the males have no bearsts, and others where the females have. If it be asked whether these be all men, or no, all of human species? it is plain, the question refers only to the nominal essence.<sup>51</sup>

Six years *after* Tyson’s study, in turn, Leibniz would write his lengthy reply to Locke’s essay, and would adamantly deny that there are gradations of humanity, that ‘man’ is just a name. In support of his firm commitment to the view that *inter hominem et non hominem tertium non datur*, he would rely heavily on the work of Tyson (though the English surgeon would remain unnamed):

Few theologians would be bold enough right away and unconditionally to baptize an animal that has a human figure but that lacks the appearance of reason, if it were found as a baby in the wild, and a priest of the Roman Church would perhaps say conditionally, *if you are human, I baptize you*. It would not be known if it is of the human race, and if a rational soul lodges within, and this could be the

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<sup>51</sup> Locke, *Essay concerning Human Understanding*, ed. Peter H. Nidditch, Oxford: Clarendon Press, 1975, 450-51.

case of the *Orang-Outang*, an ape that is outwardly so similar to a man..., and whose anatomy has been published by a learned Physician [i.e., Tyson].<sup>52</sup>

So, we see that around the beginning of the 18<sup>th</sup> century there was a growing debate about the possibility of greater or lesser degrees of humanity: relatively traditional thinkers such as Leibniz excluded the possibility on the grounds that being a human or not is a question entirely of the inherence of a human soul, and this has nothing to do with physiological features. But somewhat more radical thinkers such as Locke (and many were of course far more radical than he) began to argue that ‘human’ is in fact a vague category with no clearly defined boundaries. To this extent, the possibility of categorizing ‘man’ both within a broader system of relations that included other higher primates, as well as categorizing the traditional members of the species ‘man’ according to their perceived affinities to the higher primates, became thinkable at exactly the same time and for the same reasons. Physical anthropology and primatology share the same origins.

Carl Linnaeus would explicitly link these two projects by placing *Homo* among the *anthropomorpha*, an which also included monkeys, apes, and, curiously, sloths; and in turn subdividing *Homo* into *Homo europaeus*, *Homo asiaticus*, *Homo africanus*, and *Homo americanus*. There is a double movement here: both an insertion of ‘man’ into a broader zoological order, and a simultaneous division of ‘man’ into constituent subgroups. In an important sense, these two movements must occur together, in order for the idea of race to play a meaningful role in the scientific study of humanity’s place in nature. So long as human beings are kept out --as they had been prior to Linnaeus-- of the project of zoological taxonomy, on the grounds that they are not beasts, it remains difficult to see in what sense the racial divisions pick out any real class of entities. Humanity had been an all-or-nothing affair, based in the inherence or the absence of a soul, which was not a biological matter, and it is for this reason that subdivisions of humanity within any given system of nature remained unthinkable.

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<sup>52</sup> G. W. Leibniz, *Die philosophischen Schriften von G. W. Leibniz*, ed. C. I. Gerhardt, 7 vols., Berlin: Weidmannsche Buchhandlung, 1875-1890, vol. 5, 217.

However, for the most part, after Linnaeus's insertion of 'man' into nature, and the consequent double thinkability both of taxonomic links to other animals as well as of taxonomic divisions within the species, the nature of the latter sort of distinction would remain very difficult to specify with any precision or clarity, even though a great number of 18<sup>th</sup>-century thinkers were actively devoted to the project of delineating the subtypes of the human species.

Georges Buffon, Pieter Camper, Johann Friedrich Blumenbach, Immanuel Kant, and many many others would attempt to enumerate the different basic subtypes of human, implicitly or explicitly on the model of the project of zoological and botanical taxonomy, while at the same time all explicitly defending the view that (i) human beings are all descended from the same two ancestors; (ii) there is no speciation over time; (iii) differences between human 'races' can be attributed largely, perhaps entirely, to differences of diet, custom, and environment. These three points together signal that they were all well aware that a human 'race' is not biologically comparable to an animal species, but this awareness did not slow down the project of racial science at all. There has been something of an impression that the history of racial science was based on the presumption of essential or biologizing differences between different races. In fact, no one but the most radical free-thinkers in the 17<sup>th</sup> and 18<sup>th</sup> centuries would entertain such an idea. Thus there arises a sort of historiographical paradox: why, we may ask, did racial classification flourish in the absence of any real commitment on the part of the classifiers to essential differences between races? The answer may have something to do with the recent work we've already considered on the concept of 'race' in cognitive science. But let us turn, for a particularly rich example of the paradox just mentioned, to what is perhaps the most significant work of physical anthropology in the 18<sup>th</sup> century: Blumenbach's *De humani generis varietate nativa*, first published in 1775, with numerous subsequent editions to follow.<sup>53</sup>

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<sup>53</sup> Johann Friedrich Blumenbach, *De generi humanis varietate nativa*, Göttingen, 1775.

Citations are from Thomas Bendyshe's very old but still unsurpassed English edition, *The Anthropological Treatises of Johann Friedrich Blumenbach*, ed. and tr. Thomas

## 5. BLUMENBACH: VARIETY WITHOUT PLURALITY

According to Blumenbach, there are three causes which change the form of animals within the same species: climate, mode of life, and hybridism. The first two can, for him as for most of his contemporaries, bring about only relatively slight changes. But what about the third? Blumenbach believes that here is a natural variety of humankind, yet this is variety within unity. There are 'no human hybrids', yet he explicitly acknowledges 'mulatto' as a meaningful scientific classification. These two beliefs, taken together, are worthy of some pause. The very term 'mulatto' derives from the mule, which is perhaps the most familiar hybrid of the animal kingdom, invoked continuously since Aristotle as an example of nature's wisdom in rendering inter-species offspring fertile, thus nipping the proliferation of monstrosities in the bud. For Blumenbach, somewhat as for the Greek philosophers, the infertility of the offspring of hybrid copulations stems from "the providence of the Supreme Being, lest new species should be multiplied indefinitely."<sup>54</sup> Blumenbach thus takes the term 'mulatto' as, strictly speaking, a misnomer: a mulatto is not, biologically, comparable to a mule, for from a mulatto, as he goes on to note, one can derive 'quadroons', 'octoroons', and so on.

Yet the possibility of real human hybrids of the sort that Locke had imagined, with other animal species, is one that Blumenbach absolutely denies:

That men have very wickedly had connexion with beasts seems to be proved by several passages both in ancient and modern writes. That however such a monstrous connexion has anywhere ever been fruitful there is no well-established

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Bendyshe, London: Longman, Green, Longman, Roberts, and Green, 1865. This edition includes both the first edition of 1775, as well as the significantly modified third edition of 1795. Where needed, I have emended the cited passages in keeping with the 1775 Göttingen edition.

<sup>54</sup> Blumenbach, *The Anthropological Treatises*, 73.

instance to prove... And even if it be granted that the lascivious male apes attack women, any idea of progeny resulting cannot be entertained for a moment, since.. travellers relate that the women perish miserably in the brutal embraces of their ravishers.<sup>55</sup>

There are no hybrids between humans and apes, and moreover every creature is, as for Tyson and Leibniz, either one or the other. Thus, in order to ensure a safe taxonomic distance away from the purported *homo sylvestris* ['man of the woods'], Blumenbach writes that he is "induced to consider even that famous animal the orang-utan as a quadruped."<sup>56</sup>

Blumenbach explicitly states the central question of his work: "*Are men,*" he asks, "*and have the men of all times and of ever race been of one and the same, or clearly of more than one species?*"<sup>57</sup> He observes, without naming any names, that "[i]ll-feeling, negligence, and the love of novelty" have caused some people to adopt the view "that men are of more than one species." He goes on to explicitly associate the polygenetic theory with free-thinking and impiety:

The idea of the plurality of human species has found particular favour with those who made it their business to throw doubt on the accuracy of Scripture. For on the first discovery of the Ethiopians, or the beardless inhabitants of America, it was much easier to pronounce them different species than to inquire into the structure of the human body, ... to compare parallel examples from the universal circuit of natural history, and then at last to come to an opinion, and investigate the causes of the variety.<sup>58</sup>

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<sup>55</sup> Ibid, 80-1.

<sup>56</sup> Ibid, 86.

<sup>57</sup> Ibid, 97-8.

<sup>58</sup> Ibid, 98.

In fact, for Blumenbach, the differences between different human subgroups are so gradual that "[o]ne variety of mankind does so sensibly pass into the other, that you cannot mark out the limits between them."<sup>59</sup> Blumenbach believes that the "whole bodily constitution, the stature, and the colour, are owing almost entirely to climate alone."<sup>60</sup> Unlike Bernier, who had contrasted the 'natural blackness' of Africans with the circumstantial climatic blackness of southern Indians, Blumenbach associates pigmentation entirely with climate, and also, interestingly, with lifestyle (thus explicitly drawing together the questions of race and class identity): "Anatomists not unfrequently fall in with the corpses of the lowest sort of men," he writes, "whose reticulum comes much nearer to the blackness of the Ethiopians than to the brilliancy of the higher class of European."<sup>61</sup> Thus, Blumenbach concludes that color is an "adventitious and easily changeable thing, and can never constitute a diversity of species."<sup>62</sup>

What Blumenbach is arguing for is in effect *variety without plurality*. Indeed, upon reflection it would seem that *any* racialist thinker in a preevolutionary context who is committed to monogenesis must of necessity be committed to such variety without plurality. There cannot be real or essential divisions between races, since the human species was created as one, and all descend from the first two progenitors, connected to them, as Leibniz would put it, in 'an eternal golden chain'. The project of racial typology went ahead, explicitly on the model of species taxonomy, even as its principal contributors insisted that there could be no species-like or essential divisions within the human species to the extent that it consists entirely in descendants of the same original ancestors, and to the extent that speciation was not yet a consideration.

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<sup>59</sup> Ibid, 98-9.

<sup>60</sup> Ibid, 101.

<sup>61</sup> Ibid, 108.

<sup>62</sup> Ibid, 113.

Polygenesis would become a possibility for 19<sup>th</sup>-century racist pseudoscience, particularly in the United States.<sup>63</sup> At the time of Blumenbach's work, however, the idea of separate creations was principally associated with radical free-thinkers who wished to call into question the authority of scripture. Typical of other mainstream racialist thinkers in the late 18<sup>th</sup> century, Blumenbach is very clear in his opinion of polygenesis: "Such is the subtlety of the human intellect, and such the rush for novelty, that many would rather accept a new, though insufficiently considered opinion, than subscribe to ancient truths which have been commonly accepted for thousands of years."<sup>64</sup>

So, for Blumenbach, the most famous of racial typologists, all races descend from the same progenitors and presuppose a theory of eternal species fixism; the races pass imperceptibly from one into the other, so that you "cannot mark out the boundaries between them"; attempts to enumerate the number of races are "arbitrary indeed," including, evidently, his own; whatever we might ascribe to racial difference can be accounted for "owing almost entirely to climate alone"; and color in particular is so superficial that it can easily change over the course of an individual's life, either through changes in diet or climate, or simply through internal changes in the life cycle, of the same sort as we see in the graying of hair. Again, for a reifier of race, Blumenbach certainly cedes quite a bit to what we would call the 'constructionist camp'.

This much comes out even more clearly in the 1795 edition and expansion of the work, in which he has now abandoned Linnaeus's four-part division of the races in favor of his own, distinctive, and certainly more influential five-part division:

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<sup>63</sup> For a typical example of a 19<sup>th</sup>-century American defense of polygenesis on blatantly racist grounds, see B. H. Payne, [Ariel], *The Negro: What Is His Ethnological Status?*, Cincinnati, 1867.

<sup>64</sup> *Ibid*, 98.

Five principal varieties of mankind may be reckoned. As, however, even among these arbitrary kinds of divisions, one is said to be better and preferable to another; after a long and attentive consideration, all mankind, as far as it is at present known to us, seems to me as if it may best, according to natural truth, be divided into the following varieties... Caucasian, Mongolian, Ethiopian, American, and Malay.<sup>65</sup>

Blumenbach continues, prefixing a 'double warning' to his enumeration of the different characteristics of the five races:

First, that on account of the multifarious diversity of the characters, according to their degrees, one or two alone are not sufficient, but we must take several joined together; and then that this union of characters is not so constant but what is liable to innumerable exceptions in all and singular of these varieties. Still this enumeration is so conceived as to give a sufficiently plain and perspicuous notion of them in general.<sup>66</sup>

There seems to be an odd vacillation in the first part of the passage: how can an 'arbitrary kind of division' be made 'according to natural truth'? The language is to some extent reminiscent of Bernier, who wrote that he had found it 'convenient' to divide up the world in his new way. In their simultaneous desire to carve up human subgroups even as they concede that these do not exist in nature, we might detect in racial typologists from Bernier to Blumenbach a grasping for language that they do not yet have, and that would not be available until the cognitive turn. The best that they can do is to speak of their 'new divisions' in terms of 'convenience'; what they cannot do is explain *why* it should be convenient, given that they also acknowledge that racial difference marks out no real difference, that any divisions are necessarily arbitrary, and so on. If we agree with Gil-

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<sup>65</sup> Ibid, 264.

<sup>66</sup> Ibid, 265.

White, Machery and Faucher, and others, this ‘convenience’ is nothing other than a fit with a natural aptitude of the human mind.

## 6. CONCLUSION: THE HISTORY OF RACIAL SCIENCE IN LIGHT OF THE COGNITIVE TURN

As already emphasized, that the natural aptitude identified by cognitive science comes to be expressed specifically in *global* typologies of human subgroups only towards the end of the 17<sup>th</sup> century is easy to understand: this is the first time in history that we see great progress in attempts at global knowledge of any sort at all: increasingly accurate world maps, the measurement of longitude, and so on. That these global typologies should in turn reproduce the language and some of the presuppositions of biological taxonomy flows in turn from the tremendous recent progress of the taxonomic project, combined -- which we may see only in retrospect-- with the innate tendency to conceptualize ethnic difference as species difference, and this even when the explicit scientific theory of ethnic or racial difference does not commit itself to any species-like or biologically significant essential differences between races. As I have gone some way towards showing, the racial theories of Bernier and Blumenbach (which are representative of the 100-year period of which they mark the extremities) have no such essentialistic commitments.

This account corrects two common presuppositions in the recent literature on the history of the concept of race. The first has been that thinking about humanity in terms of racial subgroups is a distinctly modern invention. In fact the recent cognitive literature suggests that it has been with us all along, even if there is no explicit theory of race associated with the perception of racial difference. Second, what *is* invented in the modern period is a system of racial typology that supervenes on the prior and parallel project of biological taxonomy, even as it *explicitly* and repeatedly denies that the divisions it is making, very much in contradistinction to species divisions, are actually given in nature.

Blumenbach’s work in fact serves us strong testimony for the legitimacy of the cognitive turn: at the height of the modern taxonomic project, he both continues the taxonomic project at the subspecies level in the case of human beings, thereby implying that there

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are real or natural boundaries between subspecies kinds, even as he denies that the sort of features that make inter-species boundaries real arise at the subspecies level. Blumenbach picks out, and names, and calls real the races of men, even as he deprives them of the features that he explicitly cites as making species real. It is as if the tendency of the human mind to carve nature up into kinds is so great that it cannot leave off where it knows nature has left off, but must keep on picking kinds out at the sub-kind level.

Now the 19<sup>th</sup> century is a very different chapter of this history, for reasons ranging from the crisis and eventual disappearance of the institution of slavery, to the rise of evolutionary theory and the consequent demise of the commitment on religious grounds, still upheld by Blumenbach, to monogenesis. In a future study I will treat of some of the causes of the essentializing turn in 19<sup>th</sup>-century debates about race; here I wish only to point out that the usual culprits picked out as the ‘inventors’ of the modern concept of race have been picked out unjustly; or rather, to put it another way: the early modern concept and the modern concept are two distinct things.

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