

[Forthcoming in M. Dascal et al., *Controversies in the Scientific Revolution*. Draft only.
Do not cite without permission]

The Pre-Adamite Controversy and the Problem of Racial Difference in 17th-Century Natural Philosophy

Justin E. H. Smith

1. Introduction

One of the most intractable and divisive controversies of the modern period has revolved around the question as to the unity or diversity of the human species. How different are the various human sub-groups (sometimes called, unscientifically, 'races')? Do these differences extend to cognitive faculties and behavioral repertoires, or are they only skin-deep? What is it that explains the differences? Separate evolutionary pasts? Separate creations? Degeneration from an originally perfect and homogeneous state?

Over the course of the 20th century, a solid scientific consensus emerged that effectively answered all of these questions: we now know that the genetic differences between any two members of a single 'race' are on average just as great as those between any two members of two different 'races'. Problem solved. However, in spite of the often blatantly racist motivations of the modern European theorists of racial difference, the fact remains that prior to the 20th century the question of the extent of racial difference was a question very much worth asking. The human species really is full of variety. This just happens to be a variety of individuals, but there is no *prima facie* reason why different human groups should not be unequal in various respects. If *homo sapiens* had not killed off the Neanderthals, after all, we would in fact be living in a world that includes a cognitively inferior human group.

At the beginning of the modern period, controversies having to do with the extent and the causes of human diversity were motivated by a genuine concern to make sense of the new

ethnographic and physical-anthropological information that was flooding into Europe as a consequence of the rapid rise of exploration, trade, and colonization. This information challenged many deeply held beliefs about the unity of the human species. One of the most controversial interpretations of this new information, the theory of polygenesis, effectively deprived Christian scripture of its supposedly universal authority by decoupling the origins of 'pagan' peoples from the account given in the book of Genesis of the origins of those humans whose generations extend back to Adam and Eve.

This theory is best known in its 19th century American expression. Here, its defenders held that the different races --but most saliently the 'white' and the 'black' ones-- were created separately, and thus shared no common ancestry, and thus, by extension, that there were no reciprocal moral obligations between the races. Buckner Payne, the virulently racist author of the 1867 screed, *The Negro: What Is his Ethnological Status?*, insists that his argument is "purely ethnological and Biblical," and has nothing to do with slavery (Payne 1867, 3). Whether this is the case or not, one cannot help but notice the distinctly American inflection of his version of pre-Adamism, which is concerned to argue for separate creations of 'blacks' and 'whites', rather than to account for the origins of New World natives, which had been the central preoccupation of 17th-century polygenesis. "It will be admitted by all, and contradicted by none," Payne proclaims, "that we now have existing on earth, two races of men, the *white* and the *black*" (Payne 1867, 4). Payne believes that blackness does not result from the curse of Ham (see Goldenberg 2003), since nowhere in scripture is it indicated that this curse involved a blackening of the skin, kinking of the hair, and so on, while, manifestly, other curses, such as that of Adam and Eve themselves, did not result in these effects. Payne concludes that the 'negro' "must have been in the ark... and if he entered it, ... he must have *existed* before the flood, and that, too, just such negro as we have now, and consequently not as a descendant of Adam and Eve; and if not the progeny of Adam and Eve, that he is inevitably a beast" (Payne 1867, 7).

Polygenesis theory's 19th-century expression bears little relation, as we will see, to the best known early modern version of it, articulated some 200 years earlier by Isaac La

Peyrère, a French theologian and the author of the scandalous 1655 work, *Prae-Adamitae*. There is, for one thing, no suggestion in La Peyrère that not descending from Adam is tantamount to animality. Instead, La Peyrère posits the separate creation principally because he is intent to establish an alternative chronology, which requires that the chronologies related by non-Adamites be taken seriously. According the early modern iteration of polygenesis, there is in fact a scriptural basis for the view that there were 'men before Adam'. Properly understood, scripture provides a way of accounting for the presence of human beings at the far corners of the globe, who have no knowledge of the revealed truth of the Judeo-Christian tradition, and with physical appearances that could, with the limited and distorted information available, reasonably be thought to be different enough from those of Europeans to justify the claim of separate creations.

While based in scripture, pre-Adamism undermined one of the central projects of the institutions that derived their authority from scripture: the missionary enterprise. Missions, however dismissive of non-Christian belief systems, were nonetheless based on a presumption of a universal human nature: these people warrant conversion because they are, at bottom, like us. But pre-Adamism was skeptical of this presumption. Given the available information about ancient history and prehistoric migrations of peoples, there was very good reason to think that the inhabitants of different continents and of far-flung islands had to have come into being separately from those people thought to be descended from Adam and Eve. The principle of parsimony spoke against the project of rooting all newly discovered peoples in the available historical tradition, but in the end it was just this that monogenetic accounts of human origins had to do in order to account for the ancestral link of, say, the Native Americans to the first parents in the Garden of Eden.

One of the implicit messages of early modern polygenesis might be summed up as: "Let us leave them alone, for they are not like us." This went directly against the missionary project, which might in turn be summed up as: "Let us interfere in their world, for they *are* like us." Yet by the 19th century, polygenesis theory would be remolded to support a very different sort of hortation: "Let us dominate them, for they are not like us." In this

period, it would come to serve as one of the principle arguments, especially in the United States, in defense of the now threatened institution of slavery. For most in the 17th century, it was presumed that because it is the man of the Bible who is created in the image of God, if people on the other side of the world had a separate creation, then they could not but be seen as unequal, in terms of relative likeness to God, to those in the Christian world. And thus monogenesis ensured both the appropriateness of missionary work at all corners of the globe, as well, at least from the point of view of the missionaries, as the full equality --again, in terms of relative proximity to God-- of all ethnic groups. In the 17th century, to deny the shared origins and equality of all ethnic groups was to deny the universality of scripture and to deprive the project of proselytization of any sense, and was thus deeply heretical.

How, now, do we get from La Peyrère's version of pre-Adamism to that of Payne?

I propose, to begin, that the theoretical difference between La Peyrère and Payne --quite apart from any consideration of the social and historical exigencies that made the respective theories attractive-- has to do with two fundamentally distinct, but related, ways of accounting for the unity and the distinctness of different ethnic or 'racial' groups. I will refer to these as 'autochthony' and 'traduction'. The distinction might also be captured by that familiar and infamous phrase, 'blood and soil', though by this we must not understand, as the Nazi ideologue Richard Darré intended in coining the phrase, a pair of notions that must go together. Rather, we must understand two fundamentally different, if compatible, kinds of explanation of what it is that gives a human population its cohesion. The former notion says that it is by descent from common parents, by what Kant would later call 'the unity of the generative principle'. The latter notion identifies shared membership in a discrete population as stemming from a connection to a certain territory of the earth. In its most extreme formulation, the 'blood' principle would have it that no member of a given subpopulation of human beings can share blood or hybridize with a member of another population, either because of an absence of interfertility or, more commonly, because any resulting offspring would belong to the population of neither of the parents. In its most extreme formulation, the 'soil' principle would have it

that a given group literally springs forth from the earth in the place where it will continue to reside until the end of days.

I propose, further, that the overwhelmingly more appealing early modern account of human diffusion throughout the globe was traductionist, and that this was coupled with a 'degenerationist' account of human diversity, according to which, over time, climates and environments change the physical appearance of the human populations that inhabit them, even though no amount of change in appearance could ever lead to change of species. I propose, finally, that in the one prominent instance of non-traductionist explanation of human origins in the 17th century, pre-Adamism, the motivation for this was not at all a preference for autochthony, but rather a concern to establish the legitimacy of parallel cultural traditions, particularly in the sciences of chronology and astronomy, that are not mentioned in Judeo-Christian scripture. The motivation was not to marginalize non-European peoples as earthborn (and thus soulless) or as extrascriptural (and thus in an important sense beyond the pale of history), but rather to insist on the legitimacy of cultural traditions that do not trace their own origins back to Genesis. It was not part of the scope of early modern pre-Adamism to offer a typology of separately created human races; where typology was the central concern of an author --as for example François Bernier-- there is simply no account of, or apparent interest in, the causes of the apparent physical differences between the races.

There was, in sum, a tremendous controversy in the 17th century over the origins of non-European peoples, but the controversy in its essence had to do with the question of the limits of scriptural authority in the context of a newly globalized natural science, *not* with the question of the equality or inequality of the various 'races'.

I would like to proceed to make the case for this cluster of proposals by focusing, principally, on the work of two pairs of 17th-century authors --first, Isaac La Peyrère and Matthew Hale; and second, François Bernier and G. W. Leibniz-- who were at the center of the early modern controversies concerning the origins and diversity of the human species. In each case, we see a sharp critic responding to an influential new theory. Hale

responds to La Peyrère's theory of separate creations, while Leibniz responds to Bernier's attempt to offer a typology of the basic 'races' or 'species' of human beings. Taken together, these two related controversies show, first of all, that where ancestral links between human populations were denied, what was at issue was not a separation of 'races' in the later sense that would emerge over the course of the 18th century; and where an enumeration of the races was at issue, there was no interest in the question of ancestral links or their absence. In both cases, we find deep disagreements, but what is perhaps more revealing is what the rival parties in the controversies do not so much as think to disagree upon. La Peyrère and Hale both agree that what is in question is the problem of accounting for global diffusion and for alternative historical and scientific traditions, not of accounting for 'racial' difference. Neither Bernier nor Leibniz, in turn, takes an interest in applying the new theory of racial classification to a hierarchy of lower and higher racial types; nor does Leibniz, contrary to a widely held opinion, believe that racial classification reflects any real differences between human groups, which he sees as fully and equally human in virtue of their shared ancestry.

2. Early Modern Polygenesis Theory

While the theological debates that gave rise to pre-Adamism were very old, in the early modern period they were being played out in a new, globalized context. It was above all the discovery of the New World, and the problem of accounting for its inhabitation, that provided a strong incentive for new articulations of this theory. On any non-polygenetic account of the dispersion of the human species, it became difficult to think of human beings as essentially connected to any particular territory or other. The human species came to appear essentially migratory, and any features a group may have for now are only the reflection of their current geographical setting. It was in this respect, among others, that it became easier for many to think of the New World inhabitants as having a separate creation. Thus Francis Bacon writes in his "Of the Vicissitude of Things": "If you consider well, of the people of the West Indies, it is very probable that they are a newer, or a younger people, than the people of the Old World" (cited in Popkin 1987, 39). Indeed, the earliest theoretical elaborations of the polygenesis theory in the age of

discovery were put forth within the context of controversies that were being played out in Spanish America in the 16th century. While libertines who remained in the Old World, such as Lucilio Vanini and Giordano Bruno, and natural philosophers such as Paracelsus and Andrea Cesalpino were ready to entertain the idea that barbarians are, like insects, 'imperfect' and thus generated spontaneously out of the earth, without exception the Spanish missionaries who came into contact with Native Americans were intent on arguing for the common descent of all humanity.

As Anthony Pagden has argued, for the Spanish in the New World, it was the Greek model of the barbarian, translated into the Christian context of an open-ended *congregatio fidelium*, that prevailed. For the Greeks, a barbarian was defined simply by the absence of real speech, which in turn was identified with *logos* or rationality, the thing that makes a human being properly human. But this absence was not a genetic condition, and could be corrected even in the course of a barbarian's life. The very goal of the missionaries was to provide such a 'correction'. Thus while Gonzalo Fernández de Oviedo, in his *Historia general y natural de las Indias* of 1535, characterizes the Native Americans as among the most barbaric people on earth, and while Bartolomé de Las Casas for his part, in his 1551 *Apologética historica*, denounces the Europeans as the true barbarians in view of their brutality towards the Americans, both of these diametrically opposed authors agree that Europeans and Americans had to have had one and the same creation. Las Casas argued, instead, that it is Africans who are truly subhuman, and who should thus be imported to the New World *en masse* for slave labor, even as the Native Americans he defended were being converted to, and purportedly saved by, Christianity.

In these early debates, physical appearance does not appear to have played a significant role in the appraisal of different groups of people as either intrinsically or accidentally barbarian. Rather, the case was made on the basis of the perception of cultural difference. Later, in the second half of the 17th century, when polygenesis became a viable position to take up in the controversy over human diversity (as opposed to a mere libertine provocation), preoccupation with 'racial' difference still remained more or less absent. What was of greatest concern now was not so much accounting for either

physical difference or perceived cultural inferiority, but rather accounting for (i) the widespread diffusion of human beings throughout the world; (ii) the fact that many of these human beings had alternative chronologies that contradicted the one familiar from Genesis; and (iii) the apparently extra-historical (because extra-scriptural) status of the various widely dispersed groups of people. Until the age of exploration, 'history' was understood as encompassing only those groups of people for whom there was already an available textual tradition; the only way to make newly discovered or far-flung peoples historical was to connect them to these available traditions. Thus in an earlier work, the 1644 *Relation de l'Islande*, La Peyrère criticizes the view that the Icelanders, along with their revered 'prince' Odin, are descended from an errant faction of the ancient Roman army as follows: "[W]hat is the hope of being able to accept all of the fables that they tell about this Asiatic Odin, and what connection could such weak fables have with the age of Pompeius, which is an age so well known, and so historical?" (La Peyrère 1644, § 35). Here, the pre-Adamite author is suggesting that it is much easier to suppose that far-flung peoples --and here, as also in Grotius, Iceland is thought to be a sort of stepping-stone towards the New World, rather than an island securely within the European sphere-- have their own histories, whether written or unwritten, rather than to strain to derive them from the available textual traditions beginning in the Mediterranean region.

La Peyrère's eventual defense of pre-Adamism would be motivated by just this sort of questioning. In his *Prae-Adamitae*, which appeared in English translation in 1656 under the title, *Men Before Adam*, La Peyrère cites Romans 5:12-14 as support for the Pre-Adamite hypothesis. Here the apostle Paul writes that before "the time of Law sin was in the world," and La Peyrère interprets this to mean that there were sinful *people* already when, with Adam, law came into the world. Paul's epistle served to include all newly discovered peoples within the core textual tradition of Europe, even as it excluded them from the group of people who were bound by ancestry to this tradition. It made sense of them, insofar as it found a mention of them in the Bible; but at the same time it denied that the Bible could have any authority for them.

The author was pressured into retracting the views defended in this work, but not soon enough to prevent his argument from making a profound impact. There were at least a dozen important treatises in the latter half of the 17th century seeking to refute La Peyrère's thesis. Three of these were of particular significance, all published in 1656: Philippe Le Prieur's *Animadversiones in librum Prae-Adamitarum*, Johann Hilpert's *Disquisitio de Prae-Adamitis*. and the revealingly titled work of Anton Hulsius, *Non ens prae-adamiticum, sive confutatio vani et sociniantis cujusdam somnii, quo S. Scripturae praetextu in cautioribus nuper imponere conatus est anonimus fingens ante Adamum primum homines fuisse in mundo*, which is to say: "No pre-Adamite being, or, a confutation of a certain someone's vain and Socinianizing dream, by which an anonymous author, on the pretext of the Holy Scripture, endeavored not long ago to establish to the incautious that there were men in the world before the first Adam." There were, in fact, far more refutations than defenses, and every defense was shrouded in either caution or anonymity. Richard Popkin explains that "[p]ractically nobody in the seventeenth century was willing, publicly, to accept the pre-Adamite theory or any form of polygenesis. The irreligious implications were too great for the theory to be given much credence prior to the Enlightenment... The explanatory value of a polygenetic theory was great, but the danger of holding to it was, perhaps, greater" (Popkin 1987, 115).

La Peyrère's thesis was however at least cautiously praised by a number of prominent figures in the Republic of Letters, including Guy Patin and Marin Mersenne, both of whom saw in it a promising way of making sense of certain problems of biblical exegesis, not only with respect to Paul's epistle to the Romans, but also the more well-known problem of accounting for the origins of Cain's wife in the book of Genesis (Gliozzi 2000, 445-46). But Patin and Mersenne expressed their opinions in private correspondence, and only on the basis of their knowledge of the pre-circulated manuscript of La Peyrère's *Prae-Adamitae*. After it was published in 1655, enormous controversy ensued. La Peyrère had set off a war with many fronts. His thesis was challenged on the grounds that it did not in fact adequately account for events described in scripture. From the other direction, it was challenged on the grounds that there are

other, less radical ways of accounting for both human diffusion throughout the globe as well as for the alternative chronological traditions of non-European peoples.

Some authors, particularly liberal Jesuits who were deeply familiar with non-European scientific traditions, would, shortly after the initial round of attacks on La Peyrère, begin expressing cautious sympathy for polygenesis on the grounds that no plausible reading of Genesis can possibly accommodate the vastly older calendrical systems of, e.g., the Chinese and the Mexica. As William Poole (2004) notes, much of the evidence for alternative datings of the earth's distant past was being accumulated and reflected upon by Jesuit missionaries who considered it part of their missionary task to learn as much as they could about the scientific accomplishments of the peoples they sought to convert. It was the Jesuit Martino Martini's *Sinicae Historiae Decas Prima* of 1658 that called attention to Chinese chronology's incompatibility with that of the Old Testament, and on this basis explicitly questioned Biblical universality. For Martini as for other cautious sympathizers, it was chronology rather than phenotypic variety that presented the strongest argument in favor of pre-Adamism and against monogenesis.

The pre-Adamite thesis was challenged at once on the grounds of biblical exegesis, the implausibility of extra-scriptural chronologies, and the plausibility of traductionist accounts of the population of the earth. Accounting for the details of global traduction was a task that required the assembly and interpretation of extremely fragmentary geographical and linguistic data. Some of the speculative proposals from the mid-17th century as to the possible ancestry of the Native Americans appear outlandish, but without exception they also reveal the lack of any perception of 'racial' difference between the New World inhabitants and 'white' Europeans. Already in 1643, Hugo Grotius conjectured, in his *De origine gentium americanarum*, that the Americans are of Norwegian origin, since it is only the Germanic languages that have any clear similarity with the languages of the New World. Grotius arrives at this position, as the least implausible one, by a process of elimination: the only alternative to the hypothesis of Scandinavian origins, he reasons, would be to hold "either that they existed from eternity, according to the opinion of Aristotle; or that they were born of the earth, as a fable tells

us concerning the Spartans; or from the ocean, as Homer maintains; or indeed that they were created before Adam, as someone in France imagined recently." All of these views, Grotius adds, "seem very dangerous for piety, while believing what I have said is not so at all" (Grotius 1542, 15; cited in Gliozzi 2000, 450). Only diffusion or traduction offers a way of accounting for human diversity while avoiding impiety.

In sum, while La Peyrère's account of human diversity in terms of separate creations was fiercely contested, and cautiously defended, the controversy centered around the proper interpretation of scripture, the relevance of alternative scientific traditions, and the problem of diffusion. It did not have anything to do with 'race' in the way this would come to be understood over a century later. The problems of diffusion and chronology, as opposed to 'racial' difference', are dealt with at length by the English jurist Matthew Hale in his work *The Primitive Origination of Mankind*. Hale's contribution to the early modern polygenesis debate is of particular interest in view of its treatment of the problem of human diversity as a problem of natural philosophy, which is to say of science, rather than of biblical interpretation. Let us look at his contribution to the debate in some detail now.

3. Hale's Biogeographical Account of Human Diversity

Interestingly, while La Peyrère accepts the heretical doctrine of polygenesis, and Hale rejects it, it is the heretic who spends almost all of his effort explicating scripture and looking for a justification of his view in the holy writ, while the traditionalist for his part devotes much of his energy in the *Primitive Origination* to providing a plausible naturalistic account of diffusion into, and biodiversity in, the New World.

Hale explicitly identifies the possibility of the spontaneous generation of insects as relevant to our understanding of the 'primitive origination of mankind'. He seeks to provide an account of how it is that human beings could have arisen *ex non genitis*, that is, from elements or principles that were not themselves generated. He maintains that this production could have happened in one of three ways: it could have been 'fortuitous or

casual', it could have been 'natural', or it could have happened 'by the immediate Power, Wisdom, and Providence of Almighty God and his meer *Beneplacitum*' (Hale 1677, 256). All of these three ways, in any case, would require that the first creatures of any species came into being in a different way than all of their subsequent descendents; they would have to be produced, namely, *ex non genitis*, or from things that are not themselves generated, whether these be atoms or God. Hale believes that this "Method of production of Men and perfect Animals is ceased" in the present age, "and their production now delegated ordinarily to Propagation," but he considers the possibility that "in some places, and at some times, especially between the *Tropicks*, such a Pullulation of Men and Beasts may be supposed to be" (Hale 1677, 257). Hale rejects this possibility, but his characterization of the view of his opponents is significant, since it shows the widespread association in the early modern period (an association extending back to antiquity) between those parts of the world inhabited by Africans, and later also by New World natives, on the one hand, and the possibility of being born from the earth on the other.

In fact, though, for Hale, spontaneous generation of any sort is excluded. "[E]ven the generality of Insects, which seem to be spontaneous, is truly seminal and univocal" (Hale 1677, 272). Why does Hale want to foreclose the possibility of spontaneous generation even of the 'imperfect' or 'indeterminate' creatures? For him, imperfect insects "were at first in their first Creation determinate and certain; and although since partly by degeneration, partly by various mixtures their *Species* are changed and multiplied, even as the perfect Animals in *Africa* are by a mixture of *Species*, yet they were at first determinate" (Hale 1677, 272-3). He reasons that insects are "in some respect more admirable" than larger animals, "as a small Watch is an evidence of greater skill and artifice than a greater." For this reason, he refuses to "fetch Arguments against the like spontaneous Productions of the greater Animals from any contemptible valuation of these smaller, and these little Models of sensible Life" (Hale 1677, 276).

According to Hale, the first generation of creatures was by 'divine power and ordination', and not from any preexisting primordium or seed. But once the divinely ordained kinds were in existence, all future generation was by way of 'propagation', which is to say by

way of sexual reproduction. "[T]hat Prolifick Power of propagating," he explains, "was never delegated or committed to the Earth, or any other Casual or Natural Cause; but only to the Seminal Nature, derived from their Individuals, and disposed according to that Law of propagation of their kind, alligated as before to their specifical and individual nature" (Hale 1677, 305). If we should suppose any other kind of origination of humanity than by God's divine creation, "we may with as fair a Supposition imagin that a Man should be produced by the natural conjunction of Sheep or of Lions, or a Star be produced *ex putri materia terrestri*, as to suppose a Man to be produced accidentally, casually, or naturally" (Hale 1677, 316). In short, generation by fortuitous causes is just as much a disruption of the cycle of ordinary species reproduction as would be the monstrous birth of a creature of one species from parents of another. Hale finds far more reasonable the 'divine hypothesis' that "the first Individuals of Humane Nature, had their Original from a Great, Powerful, Wise, Intelligent Being."

But why not hold open the possibility that there had been several independent 'originals' of this sort for different human populations? Earlier, in Section II of the *Primitive Origination*, Hale notes that

[t]he late Discovery of the vast Continent of *America* and Islands adjacent, which appears to be as populous with Men, and as well stored with Cattel almost as any part of *Europe*, *Asia*, or *Africa*, hath occasioned some difficulty and dispute touching the Traduction [note the term] of all Mankind from the two common Parents supposed of all Mankind, namely *Adam* and *Eve* (Hale 1677, 182).

The greatest problems arise, Hale believes, "concerning the storing of the World with Men and Cattel from those that the Sacred History tells us were preserved in the Ark" (Hale 1677, 182). He sharply recognizes that the study of 'Cattel' can help us to learn about the diffusion of men, and his proposal for studying the human past in part by looking at current biodiversity is remarkably advanced. There are, he notes, "divers perfect Animals of divers kinds in *America* which have none of the same kind in *Europe*,

Asia or *Africa*." From this, "many people conclude that the Americans could not be descended from Adam." He summarizes their position as follows:

That since by all Circumstances it is apparent that *America* hath been very long inhabited, and possibly as long as any other Continent in the World, and since it is of all hands agreed that the supposed common Parents of the rest of Mankind, *Adam*, *Noah* and his three Sons, had their Habitations in some Parts of *Asia*, and since we have no probable evidence that any of their Descendants traduced the first Colonies of the *American* Plantations into *America*, being so divided from the rest of the World, the access thither so difficult, and Navigation the only means of such a Migration being of a far later perrection than what could answer such a Population of so great a Continent: That consequently the *Americans* derive not their Original either from *Adam*, or at least not from *Noah*; but either had an Eternal Succession, or if they had a Beginning, they were *Aborigines*, and multiplied from other common Stocks than what the *Mosaical* History imports (183).

Hale sharply disagrees, though he does acknowledge some ethnographic evidence that supports the polygenetic conclusion. Though the traditions of America "be mingled with some things fabulous," nonetheless "they seem to favour [the] Conclusion" of the polygenesis theorists (Hale 1677, 183). Yet Hale's preferred sort of evidence is not ethnographic or scriptural, but rather biogeographical. He argues that "the Origination of the common Parents of Mankind were in *Asia*, yet some of their Descendents did come into *America*." He suggests that the 'transmigration' from Asia to America could have happened by land or by sea, but that the latter is more likely, since, "though it may be possible that there may be some junctures between the North Continent of *America* and some part of *Tartary*, *Russia*, or *Muscovy*, yet none are known, unless the Frozen Seas in those Parts might be a means to transport Men thither" (Hale 1677 189). (It is interesting to note in passing here that one of the principle motivations Leibniz would have in gaining influence with the tsar of Russia would be to convince him to organize an expedition to determine whether Asia and America do in fact connect: a plan that would

eventually be realized in Vitus Bering's second Kamchatka expedition of 1733-43.) In a remarkable illustration of the absence of any perception of what we would think of as racial difference, Hale suggests that "those Countries in *Asia* or *Europe* that with greatest probability first peopled *America*, seem to be," in the following order: (i) the ancient British; (ii) the Norwegians; (iii) the Tartars or Scythians; (iv) the Phoenicians or Carthaginians; or (v) the Chinese (Hale 1677, 195). Any one of these groups, in Hale's view, could have given rise to the current population of the Americas.

Hale also reasons that the current distribution and shape of land masses in the world is not the same as it once was. The prospect of continental drift and erosion had been widely entertained at least since Abraham Ortelius's *Thesaurus geographicus* of 1587, though as far as I know Hale is among the first to use it to support an argument in favor of a diffusionist account of the unity of the human species. He argues at great length that "we can by no means reasonably suppose the Face, Figure, Position and Disposition of the Sea and dry Land to be the same anciently as now," and that "those parts of *Asia* and *America* which are now dis-joined by the interlucency of the Sea, might have been formerly in some Age of the World contiguous to each other" (Hale 1677, 193).

But what about the animals? Hale notes that, even if we suppose the human beings got there *ex industria*, still "it is not easily conceivable how Beasts, especially of prey, should be transported into *America* through those large Seas" (Hale 1677, 184). But he is not easily dissuaded from his diffusionist convictions, and he goes on to argue, on the basis of his reading of "Grotius, Laetius, Breerwood, Hornius, Josephus Acosta, Mr. John Webb, Martinius and others," that there is a plausible way of accounting for the "Manner of Traduction of Brutes into *America*" (Hale 1677, 189). The variety of flora and fauna in the New World that are different from those of the Old World can be explained, Hale thinks, along degenerationist lines, by "the promiscuous couplings of Males and Females of several *Species*, whereby there arise a sort of Brutes that were not in the first Creation" (Hale 1677, 199). Though any species remains one and the same thing through its history, in view of the 'unity of the generative power' (to speak with Kant), nonetheless Hale's degenerationism allows for intra-species variation resulting from environmental

factors. After all, he notes, "among Animals, the *Indian* Elephants are larger than the *African* [in fact it is the other way around]; the *English* Mastiff degenerates in his courage and fierceness, at least in the first succession by generation, when brought into *France*." Hale suggests that the Llamas of Peru might "be primitively sheep" (Hale 1677, 201). As with animals, so to with the variety of humans:

Nay let us look upon Men in several Climates, though in the same Continent, we shall see a strange variety among them in Colour, Figure, Stature, Complexion, Humor, and all arising from the difference of the Climate, though the Continent be but one, as to point of Access and mutual Intercourse and possibility of Intermigrations: The *Ethiopian* black, flat-nosed and crisp-haired, the *Moors* tawny; the *Spaniards* swarthy, little, haughty, deliberate, the *French* spritely, sudden; the Northern people large, fair-complexioned, strong, sinewy, courageous... And there is no less difference in the Humors and Dispositions of People inhabiting several Climates, than there is in their Statures and Complexions. And it is an evidence that this ariseth from the Climate, because long continuance in these various Climates assimilate those that are of a Foreign extraction to the Complexions and Constitutions of the Natives after the succession of a few Generations (Hale 1677, 200-01).

In effect, Hale derives the entire human species from traduction, and in order to do this he makes highly speculative conjectures about the migrations of peoples out of the Near East, and also about the way in which environments can change appearances without changing fundamental relations of kinship. For him, blood is key, and any influence of soil (along with sun, atmosphere, and so on), is merely superficial. Hale is interested in differences in the 'constitutions' of human groups, but does not believe that these differences should be explained in terms of any basic racial classificatory schema. He is concerned with 'national physiognomy', not the typology of races. According to many scholars, the first such typology would be presented only in the decade following Hales *Primitive Origination*, by the 17th-century French libertine philosopher and intrepid voyager François Bernier.

4. François Bernier's "New Division of the Earth"

Bernier is the first author to use the term 'race' to designate different groups of humans with shared, distinguishing traits. He describes his innovation in an article titled, "A New Division of the Earth, by the Different Species or Races of Man," published in the *Journal des Sçavans* in 1684. "So far," he writes, "Geographers did not use any other criterion when mapping out the earth but that of the different countries or regions to be found on it. What I noticed in men in the course of my long and frequent travels gave me the idea to divide the Earth otherwise."

According to Siep Stuurman, Bernier's "Nouvelle division" is in some respects "a typically seventeenth-century anthropological essay; in other respects it anticipates the eighteenth-century genre of the natural history of mankind" (Stuurman 2000, 1). Is this a correct assessment? By his own lights, Bernier's work is novel in that it does not simply divide populations up according to what might be called 'national physiognomy', which is a common practice going back at least to Hippocrates. Instead, he tries to find a small number of more basic classifications. "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 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" (Bernier 1684, 133-4).

Curiously, 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" (Bernier 1684, 134), 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" (Bernier 1684, 134). 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" (Bernier 1684, 134). 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" (Bernier 1684, 134-5). 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).

Bernier goes on to claim that the peoples of "all of Africa, besides the coasts" are characterized by the fact that, unlike the 'accidentally black' Indians, "for them blackness is essential" (Bernier 1684, 135). He avers that "it is necessary to seek the cause [of the blackness of the skin] in the particular contexture of their bodies, or in the semen, or in the blood, which is nevertheless of the same color as everywhere else" (Bernier 1684, 135). He also makes fine-grained distinctions that would be lost on later racial science; for example, he notes that "the Blacks of the Cape of Good Hope" seem to be "of a different species than the rest of Africa."

The third 'species' for Bernier are 'Asians', which includes for him the inhabitants of "part of the kingdoms of Aracan and Siam, Sumatra and Borneo, the Philippines, Japan, China, Georgia and Muscovy, the Usbek, Turkistan, Zaquetay, a small part of Muscovy". Finally the fourth species are not, as one might expect, Native Americans, but rather the Saami or Lapps, about whom he writes they are "very ugly and partaking much of the bear." He acknowledges: "I have only seen two of them at Dantzic; but, judging from the pictures I have seen, and the account which I have received of them from many persons who have been in the country, they are wretched animals." The ranking of Lapps at the bottom of the scale of humanity would remain a commonplace throughout the 18th century, in Buffon, Maupertuis, Kant, and others. As for Native Americans, Bernier

maintains that "most of them have olive skin and a face that is differently shaped than ours, nevertheless I do not find there sufficient difference for making of them a particular species that is different from ours" (Bernier 1684, 136).

Taken together, the facts that (i) Bernier dismisses Lapps as "wretched animals"; (ii) identifies Africans as "essentially black" while consistently avoiding any value-laden language as to where this essential difference places them relative to Europeans; (iii) places many of the inhabitants of the Indian Ocean rim in the same 'race' as Europeans, while insisting that if, for example, Sumatrans are to be excluded from this race, then so are Germans; and, (iv) finally, places Native Americans in the same race as Europeans: all of this suggests that Bernier had a very different range of interests and concerns than later proponents of racial science. For one thing, he was implicated neither in the project of dominating the New World, nor in the project of trans-Atlantic slavery. Perhaps as a consequence, he does not dwell on the supposed racial differences of Europeans, Africans, and Native Americans. What interests him far more is Eurasia, and here his divisions end up looking nothing like the separation of the 'Mongoloids' from the 'Caucasoids' that would become so familiar after the publication of Blumenbach's *De generis humani varietate nativa* in 1776.

Anyone who wishes to characterize Bernier as an early racial theorist should bear in mind that the last four pages of his very concise, seven-page article are devoted to extolling the beauties of the women of various nations of the world. Bernier is convinced by his extensive travels that "beautiful and ugly [women] are everywhere to be found" (Bernier 1684, 137). He is particularly fond of women of the second species, and recalls seeing several of them in Ethiopia "who were for sale, and I can say that one can see nothing more beautiful in the whole world; but they were extremely expensive, for they were being sold at three times the price of the others" (Bernier 1684, 137). This is curious material, but it is clearly more in the vein of boastful travel literature than racial science. After his description of the southern Africans differences from their neighbors, there is no further account of any physical differences between different groups, let alone any account of their causes.

There is rather more evidence for Bernier's considered views of the nature of human diversity in works other than the "Nouvelle division." In an important treatise on the peoples, customs, politics, history, and resources of South Asia, translated into English and published as *The History of the Late Revolution of the Empire of the Great Mogol* in 1671, the French traveller reflects on the work of an Indian poet who describes the 'paradise' of 'Indostan' at the confluence of four rivers: "the River *Ganges* on the one side, that of *Indus* on the other, the *Chenau* on a third, and the *Gemma* on the fourth." Bernier notes that if the poet "had concluded, that this was certainly the true Terrestrial Paradise, rather than that in *Armenia*, this would have much enhaunched the worth of all his Commendations" (Bernier 1671, 93). In effect, Bernier here regrets that the authors of the Indian literary tradition do not explicitly lay claim to one of the most important places in scriptural geography. If they had done so, it would have been plausible to grant it to them, given the actual topographical features of northern India, and given the relative closeness of this part of the world to the favored candidate in the South Caucasus. But without such an explicit identification India lies beyond the pale of history; it does not identify itself with the texts that lie at the origin of everything that could in the 17th century be recognized as falling within the scope of history. This extra-historicity of many of the earth's peoples will be, as we will later see, one of the principal motivations for early modern polygenesis theory.

In the course of describing Hindu customs of ablution, Bernier has occasion to make a revealing observation about the question of the universality and locality of religious traditions: "When I told them," he writes,

that in cold Countries it would not be possible to observe that Law of theirs in Winter (which was a sign of its being a meer human invention) they gave this pleasant answer: That they pretended not their Law was universal; that God had only made it for them, and it was therefore that they could not receive a Stranger into their Religion: that they thought not our Religion was therefore false, but that it might be it was good for us, and that God might have appointed several

differing ways to go to Heaven; but they will not hear that our Religion should be the general Religion for the whole earth; and theirs a fable and pure device (Bernier 1671, 149-50).

From the 17th-century European point of view, it is but one small step from supposing that God appointed several ways of going to heaven through several religions, to supposing that God separately created several groups of people, each with its own religion. After all, what it is to have the religion of the Judeo-Christian tradition just was to suppose of oneself that one was descended from Adam and Eve. The only conceivable way for a person to fall outside of the scope of this tradition was to come from a separate line of descent. Interfaith respect --which Bernier disdains-- practically requires a commitment to polygenesis.

While unwilling to accept polygenesis, it is important to remember that Bernier was at least a moderate libertine, as well as a devoted disciple of the materialist philosopher Pierre Gassendi, and even published a textbook summary of the philosophy of the latter, the *Abregé de la philosophie de Mr. Gassendi*, in 1674. Interestingly, Gassendi himself makes a revealing comment, if only in passing, about the variety of the human species and about the problem of determining the boundaries of the species. In his *Life of Peireskius*, published in English translation in 1657, Gassendi describes a relation of a certain Thomas Arcosius to Nicole-Claude Fabri de Peiresc, in which he related

what had happened to one of *Ferrara*, when he was in a Country of *Marmarica*, called *Angela* [i.e., Angola]. For he hapned one day upon a Negro, who hunted with Dogs certain wild men, as it seemed. One of which being taken and killed, he blamed the Negro for being so cruel to his own kind. To which he answered, you are deceived; for this is no man, but a Beast very like a man. For he lives only upon Grasse and has guts and entrals like a Sheep, which that you may believe, you shall see with your eyes; whereupon he opened up his belly. The day following, he went to hunting again, and caught a male and a female. The female had Dugs a foot long; in all other things very like a Woman... Both their Bodies

were hairy all over, but the hair was short and soft enough (Gassendi 1657, Bk. V, 92-93).

Now of course this anecdote is mediated through several parties by the time it reaches Gassendi, yet it reveals something significant about the way variety within the human species was understood by Gassendi's contemporaries, a way that Gassendi himself transmits without opposition: there is a fact of the matter as to who is a human being and who is not, even if there is great variety in physical appearance. If beasts, such as those hunted by the 'Negro' in this tale, happen to have humanoid features, there is nonetheless a way of determining absolutely whether they are in fact human or not; in this case, cutting them open and looking at internal anatomy suffices. If a creature is not 'of one's own kind', but only a beast, then there is no moral concern about cruelty towards it. But while the European supposes that the kind in question here is 'Negro', the 'Negro' in turn denies that the beast belongs to the *human* kind: he does not deny that it is 'very like a Negro', but that it is 'very like a man'. The European, and eventually Gassendi as well, does not find anything wrong with this shift, and for this reason, presumably, when 'kind' is used here in reference to 'negroes', this does not isolate this kind in any natural or essential way from the human kind of which it is a part.

By 'species', or by its synonym 'race', Bernier could not have intended the meaning commonly attached to this term today --namely, that each race is an isolated reproductive group-- any more than Gassendi intended this when he spoke of the Negro 'kind'. Though Bernier himself was not a defender of the doctrine, some of his contemporaries would come to hold the view that different races constitute different 'species' in the sense that, while capable of yielding offspring, they nonetheless had separate creations and, therefore, arose from separate lines of descent.

In my view, Bernier's role in the emergence of the modern conception of race has been somewhat overstated: his 'new division of the earth' is principally motivated by questions of physical geography (as well as simple story-telling), and he is more or less silent as to the deep nature of the difference in appearance and character of the different groups of

people he considers. The historical explanation of this is simple: he happens to have been read by Leibniz, who happens to have been read by Blumenbach, who in turn wrote the *De generis humani varietate nativa*, which served to codify the most basic outlines of racial classification, which would remain in place until the mid-20th century. Leibniz, for his part, though far from defending any theory of essential differences between different human races, did, as we will see presently, at least offer an explicit account of what a race is.

5. Leibniz: Race as Generational Series

Leibniz's name, Peter Fenves writes, "is often found in lists of those who were early proponents of a racial system of human classification." Fenves maintains that "Leibniz concurs with --and gives credence to-- the novel representation of supranational distinctions that François Bernier first proposes in his 1684 article" (Fenves 2005, 73f.). Certainly, it is clear that Leibniz read this issue of the *Journal des Sçavans*, even if it did not make enough of an impression on him for him to retain Bernier's name. In a letter thirteen years later to the groundbreaking Swedish linguist Johan Gabriel Sparwenfeld, Leibniz writes:

If it is true that the Kalmuks as well as the Moguls and Tartars of China depend on the Grand Lama in matters of religion, it is possible that this says something about the relation among their languages and the origin of these peoples. It is simply that the size and constitution of their body is so different among them.

Here, then, Leibniz is maintaining that the physical appearance of members of a population can be misleading, and that language is far more important than 'race' for determining ancestral relations. Nonetheless, he is aware of the interest in 'racial' classification that other authors have. He writes in another, undated letter to Sparwenfeld:

I remember reading somewhere, though I cannot recall where [evidently a reference to Bernier], that a certain voyager divided human beings into certain tribes, races, or classes. He assigned a particular race to the Lapps and Samoyeds, a certain to the Chinese and neighboring peoples; another to the Negroes, still another to the Cafres or Hottentots.

At this point, however, Leibniz abandons the project of a broad taxonomy of the most basic human kinds, and reverts to what we might call 'national physiognomy':

In America there is a marvelous difference between the Galibis or Caribbean, for example, who have a great deal of value and just as much spirit, and those of Paraguay, who seem to be children or youths all their lives. This does not prevent all human beings who inhabit the globe from being of the same race, which has been altered by the different climates, as we see animals and plants changing their nature and becoming better or degenerating (Leibniz 1719, 37-8).

Further in the same work in which this letter was published --one of the earliest collections of Leibniz's writings after his death, the *Otium hanoveranum* of 1719-- the editor, Joachim Friedrich Feller, provides another text, whose provenance I have not been able to determine, consisting in a nearly exact Latin paraphrase of the contents of Bernier's "Nouvelle division" (Leibniz 1719, 158-60). The text is interspersed with misspelled Italian expressions, motivating the conjecture that Leibniz composed it during his Italian voyage of 1689-90 for a colleague who could read no French, and amused himself in doing so by trying out his own elementary Italian skills. It is clear, anyway, that Leibniz's reasons for writing it fall short of assertion of the truth of its claims. Later, Johann Friedrich Blumenbach would incorporate elements from the *Otium hanoveranum* into his *De generis humani varietate nativa* of 1776, evidently failing to recognize that Leibniz is not stating his own views, but rather summarizing those of Bernier. Blumenbach writes there that "Leibniz divides the men of our continent into four classes. Two extremes, the Laplanders and the Ethiopians; and as many intermediates, one eastern (Mongolian), one western (as the European)" (Blumenbach 1865, 267).

Thus, the identification of Leibniz as a seminal thinker in the history of racial science appears to result from a simple mistaking of indirect reference for direct. For Leibniz, in fact, it is historical linguistics, and not the study of morphological differences that will give us insight into the true lineages of the various human groups. As he concludes in the text just cited, adding his own view to the long summary of Bernier's system: "I should like for the regions [of the world] to be divided according to languages, and for this to be noted on maps" (Leibniz 1719, 158). For Leibniz, it is neither blood nor soil, but speech, that reveals kinship. His new division of the earth would divide it up according to language families, not phenotypes. Beyond linguistic community, there is for Leibniz no meaningful classification of human populations short of their membership in the human race as a whole. As far as blood is concerned, everyone is related. This commitment was a fundamental principle of both Leibniz's political philosophy as well as his metaphysics of possible worlds (see Dascal 1993). Popkin maintains that Leibniz did not seem to be interested in the historical, chronological, anthropological questions that provided the ammunition for the pre-Adamite theory (that is, the prevailing version of polygenesis in the 17th century, according to which there were separately created human beings living before Adam's creation). Leibniz was, Popkin writes,

very much concerned to discuss other theologies outside of Christianity in terms of their ideological content, but not their differing claims about the facts of human history [...] His efforts to unite the churches within Christendom, and then to unite them with Islam and Chinese religion, did not involve finding common historical ground, but rather common metaphysical and moral ground (Popkin 1993, 381).

Yet, *pace* Popkin, we know from scattered passages that Leibniz was a committed monogeneticist, and that he believed that human phenotypic diversity is a consequence of environmental influence over time. Thus he notes in a text from the *Otium hanoveranum*, that all of humanity must belong to the same species, even if "they have been changed by different climates just as we see that animals and plants change their nature, in becoming

better or degenerating” (cited in Pagden 1982, 138). For Leibniz, there is only one origin for human beings, and subsequently the boundaries of the human species must remain rigidly fixed. In this respect, Leibniz may be described as a moderate degenerationist, who believes that human diversity can be accounted for in terms of environmental pressures over time in different habitats.

Why, then, does Fenves identify Leibniz as an early racial theorist? In part, it is because of Blumenbach's mistake; in part it is because of an easy confusion between early modern imperialism on the one hand, and racism on the other. Leibniz was, at least early in his life, an ardent advocate of the first, but did not even have the second available to him to support or to reject. In an audacious text of 1671, entitled “A Method for Instituting a New, Invincible Militia that can Subjugate the Entire Earth, Easily Seize Control over Egypt, or Establish American Colonies,” written as an addendum to his better known *Consilium Aegyptiacum*, Leibniz sketches out a plan for training a new army of warrior slaves:

A certain island of Africa, such as Madagascar, shall be selected, and all the inhabitants shall be ordered to leave. Visitors from elsewhere shall be turned away, or in any event it will be decreed that they only be permitted to stay in the harbor for the purpose of obtaining water. To this island slaves captured from all over the barbarian world will be brought, and from all of the wild coastal regions of Africa, Arabia, New Guinea, etc. To this end Ethiopians, Nigritians, Angolans, Caribbeans, Canadians, and Hurons fit the bill, without discrimination. What a lovely bunch of semi-beasts! But so that this mass of men may be shaped in any way desired, it is useful only to take boys up to around the age of twelve (Leibniz 1923--, 4, 1: 408).

Leibniz proposes to segregate these prisoners according to language, which for him is the same as segregation by race or genus. In this way, unable to communicate with any warriors beyond their own small squadron, the warriors will be unable to plan an insurrection. "In every race [*genere*]," Leibniz writes,

whoever is most trained in his squadron, which is to say among those who speak his language, shall challenge those who are the best trained in the other squadrons. The people [*gens*] that wins that year shall be the leaders. They will be able to strike terrible blows with their very powerful curved swords, to hit targets with their slings, and to rip things apart with their lances. They are to be trained to run races at such a speed as will be equal to that of horses. Which will come about first by pursuing them until they are able to touch the mane or the tail, and then freely [*i.e., without horses*]... They shall learn to jump after the manner of the Tenerifeans, first jumping with the help of a lance... as far as human strength is able to reach, and afterwards without these (Leibniz 1923--, 4, 1: 408-9).

Leibniz goes on to describe the tremendous feats these warriors will perform with their lances:

In the beginning they will alight from a higher place by the means of their lance touching the ground below; then they will leap horizontally on a level plane, and finally from below they will leap to the top. They will learn how to climb up smooth surfaces [*per lubrica klettern*].... They shall become used to climbing however high their lance may be just by means of fixing their lances beneath them. They will learn moreover to carry the greatest and strongest lances, like Achilles, and like other ancients. Indeed, they shall learn to project them with great impetus towards a designated target, as well as of bringing one lance together with another if the one does not suffice for climbing. By means of this art they will easily conquer the mightiest European fortifications. They will be able to walk on their lances, as on stilts [*wie auff stelzen*] (Leibniz 1923--, 4, 1: 408-9).

Wherever did Leibniz learn so much about Tenerifean martial arts? In an anonymous travel report in Thomas Sprat's 1667 *History of the Royal Society*, we find the following description of a native Tenerifean 'Guanchio' [today called Guanches], a description that Leibniz would reproduce four years later, sometimes nearly word-for-word:

[An English traveller] himself hath seen [the Guanches] leap from Rock to Rock, from a very prodigious height, till they came to the bottom, sometimes making ten fathom deep at one leap. The manner is thus: First they *Tertiate* their Lance (which is about the bigness of a half Pike) that is, they poise it in their hand, then they aim the point of it at any piece of a Rock, upon which they intend to light (sometimes not half a foot broad.) At their going off they clap their feet close to the Lance and so carry their bodies in the Air. The point of the Lance first comes to the place, which breaks the force of their fall; then they slide gently down by the Stagge, and pitch with their feet upon the very place they first designed, and from Rock to Rock till they come to the bottome. Their Novices sometimes break their necks in learning (Sprat 1667, 212-13).

Knowing this background to Leibniz's "Method" in Sprat's *History*, what has been denounced as a grossly racist tract by the young and impetuous Leibniz begins to appear more as the harmless musings of someone who has just read a compelling adventure story— one that happens to be set in the Canary Islands. The choice of settings is not at all coincidental. It is significant that, as historians such as David Abulafia (2008) have noted, the Canary Islands, explored already by 1330 and fully conquered by the end of the 15th century, amounted to a sort of prelude to the big event: the domination of the New World, which would begin a century later and which would still not be entirely finished by the time Leibniz proposes his militia for, among other things, setting up an American colony. When Leibniz proposes 'an island off of Africa', such as Madagascar, this is evidently because the Canaries have already been taken. But it is the Canaries, and the expansion of the Spanish Empire out from there, that serves as Leibniz's model and inspiration. Of course, eventually Madagascar would be decisively taken by the French, but only in the 1880s, and then on the basis of a notional claim extending back to a small French settlement that had disappeared by 1674. Leibniz's advice was taken, but with a delay of 200 years.

Leibniz is particularly adamant, in his later years, that all human beings are equally human. While even in 1671 Leibniz seems to believe that 'semi-beasts' are only in this state as a result of their upbringing, later Leibniz will come to find it unconscionable that any human being should be treated like a beast, no matter what his appearance or behavioral profile. Thus in his response to Locke in the *Nouveaux essais sur l'entendement humain* of 1704, Leibniz also takes up the problem of the 'Orang-Outang' (which is to say, according to our nomenclature, the chimpanzee) and speculates as to what this creature might mean for our understanding of human uniqueness:

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* (Leibniz 1849-60, 217).

Here Leibniz is evidently taking a cue from Augustine, who writes similarly: "Whoever is anywhere born a man, that is, a rational mortal animal, no matter what unusual appearance...or how peculiar in some part they are human, descended from Adam" (Augustine 1871, 117). For Leibniz as for Augustine, morphological deviance has nothing to do with the possession of that special office of humanity, the contemplative rational soul, and this even in the case in which the morphology is so distorted as to conceal from outside observers whether the creature in question is a human or not. Leibniz continues:

[I]t would not be known if it is of the human race, and if a rational soul lodges within, and this could be the case of the *Ourang-Outang*, an ape that is outwardly so similar to a man, of which Tulpius speaks from his own experience, and whose anatomy has been published by a learned Physician (ibid.).

Leibniz is committed to an all-or-nothing view of the divisions between species, even if Leibniz seems more inclined to allow that the orangutan falls on our side of the division rather than on the side of the animals. Leibniz believes, against Locke, that species are

set down once and for all by God, and that there can be no overlap between them. For Leibniz, it may ultimately be impossible to know whether an orangutan possesses a rational soul or not. If it does, then it is wholly a human being, deserving of baptism and suitable for salvation, no matter how different it looks from a 'normal' human being. There is a fact of the matter as to whether an ape is a man, or not. For Leibniz, this fact of the matter has to do with what Locke would call the 'real essence' and what Leibniz sometimes calls the 'interior nature'. There is for the author of the *Nouveaux essais* a clear criterion for distinguishing men from apes, even if it may be difficult to discern in practice on which side of the dividing line a given creature falls: that criterion is rationality, which, even if it is sometimes difficult to discern, ensures that no human being can ever be a true 'semi-beast'.

In view of this deep commitment to the universal equality of different human groups, Leibniz will come to believe that human diversity is something to be studied as a cultural, rather than natural phenomenon, even if cultural differences are best investigated on the model of natural history. For Leibniz, languages should be collected and studied like so many flowers in need of classification. Thus he writes to Peter the Great's war councillor, A. Huyssen, in 1703:

Among other curiosities, geography is not the least, and I find fault in the descriptions of distant countries to the extent that they do not take note of the languages of peoples, with the result that we do not at all know the relations between them, nor yet their origins. For, as nearly all of Scythia is now covered by the Russian Empire, which extends all the way to the frontiers of Tartary and of China. I wish that the languages of nations would be noted, both those nations that are subjects of the Tsar's empire, as well as neighboring peoples or those who trade with the empire's subjects (Leibniz 1873, No. 48).

Repeatedly throughout the early years of the 18th century, Leibniz recommends to his many correspondents heading east that they collect 'samples' of languages by writing down the Our Father in each of the indigenous tongues of the Russian Empire. As he

writes in an undated letter to Lubenetskii, another of the Tsar's councillors (surely composed between 1705 and 1710: "I have long wished to have *specimina linguarum* that are in the Tsar's territory, and of those bordering it, in particular I would like to have Our Father written with interlinear translations, as well as certain common words that are used in the languages. *In specie* I would like to have news of all the different sorts of Tartars, and of the distinctions between them. It is through languages that one can best distinguish peoples" (Leibniz 1873, No. 47).

For Leibniz, we can identify another nation through the outward sign of language, but we cannot really *know* a nation, that is, know what it is like to be a member of another culture, except from within. This would seem to be worlds away from the approach of someone such as Bernier, who wishes to classify human types based on visible external markers, irrespective of the cultural identity of the members of the different types. Yet, as has been mentioned, Leibniz does offer a definition of 'race'. In notes on a text by John Wilkins taken at some point between 1677 and 1686, Leibniz lists the terms *Race*, *genus*, *Geschlecht*, and *series generationum* as synonyms, also identifying genealogy as the "explication of this series" (Leibniz 1923--, 6, 4: 30-34). These definitions might be more significant than they first appear. In the earlier "Method," Leibniz had referred to the Ethiopians, Canadians, etc., variously as *gentia* and as *genera*. Does this mean that each group constitutes for him a generative unity, which is to say that each group is reproductively isolated? Certainly not: throughout his life Leibniz remains committed on Christian grounds to a monogenetic account of human origins. Even in the "Method," the barbarians are to be captured and enslaved not as subhumans, but simply as non-Christians.

A generational series, then, is something quite distinct from an isolated reproductive community. Nonetheless, as biologists today know full well, interfertility *in potentia* does not necessarily lead to offspring: for many subspecies of a given species, it is enough that the one has slightly different markings on its feathers than the other, for example, in order to turn both parties off from the prospect of mating. In the *Modus instituendi*, Leibniz appears to take Ethiopians, Canadians, and Europeans to be in much

the same situation: relatively reproductively isolated because mutually uninterested, even if biologically the same, and descended from the same first ancestors. Leibniz, like Hale, is a traductionist who believes in the unity of the human species, and he also believes, very much unlike Bernier, that if there are any more fine-grained distinctions to be made, these will be made not in terms of 'race', but rather of culture.

6. Conclusion

Hale and Leibniz are very much in agreement as to the causes, and as to the relative superficiality, of the diversity and dispersion of human beings. In their most intense engagements with the problem of racial difference, Leibniz takes on Bernier, who has an explicit system of classification of different human groups, but no account of the causes of the differences between them, while Hale takes on La Peyrère, who is not terribly interested in classifying different racial types, but with his pre-Adamism provides the theoretical possibility for what would eventually emerge as a straightforwardly racist system of classification. Hale is most interested in emphasizing the unity of the human species on the basis of biogeographical explanations; Leibniz is also interested in this, but in addition wants to account for the diversity of the human species by appeal to linguistic and cultural differences. In this respect, while Leibniz has long been mistakenly placed in a historical line of thinking that leads to the physicalist account of difference of Blumenbach and others, in fact Leibniz's true interests anticipate the interest in cultural difference of Herder and, in turn, of the 'soft' romantic nationalists of the 19th century.

The most widespread approach to the question of human diversity in the 17th century sought to account for it by appeal to traduction (which has every human being descending from the same parents) coupled with degeneration (which accounts for variation in appearance despite shared descent). Where polygenesis theory is promoted in the early modern period, for the most part this appears to be motivated by an interest, strangely enough, in *appreciating* rather than devaluing non-European peoples and their accomplishments: to argue that they were separately created was a way of arguing that they had their own histories, including their own chronologies, and that these should be

taken seriously even if they contradict our own. The early defenders of pre-Adamism denied traduction, though not as a way of highlighting the distance and difference of non-Europeans, but rather of highlighting the existence of parallel traditions.

The remarkable malleability of the purposes to which the theory of polygenesis can be put strongly suggests that a cognitivist account of the innate basis of racial classification cannot tell us much of anything about racism as a factor in the social and political sphere. It also suggests that if we want to understand the history of racism, we would do well to turn our focus from the various accounts that have been offered of the nature of human difference, and pay attention instead to the way in which these accounts serve to buttress or undermine the political and economic institutions --such as missions in the 16th and 17th centuries, or slavery in the 19th century-- that benefit from systemic inequality. Nor should it be assumed that in every time and place belief in an essential difference between one's own group (such as Europeans or people of the Abrahamic faiths) on the one hand, and outsiders (such as New World natives or sub-Saharan Africans) on the other, will necessarily amount to racism in any meaningful sense.

List of Works Cited

David Abulafia. *The Discovery of Mankind: Atlantic Encounters in the Age of Columbus*, Yale University Press, 2008.

Aurelius Augustine. *The Works of Aurelius Augustine, Bishop of Hippo*, Ed. Marcus Dods, Volume II: *The City of God*, Edinburgh, 1871.

François Bernier. *The History of the Late Revolution of the Empire of the Great Mogol*, 1671.

----- . *Abregé de la philosophie de Mr. Gassendi*, Paris, Jacques Langlois, 1674.

----- . "Nouvelle division de la terre, par les différentes Espèces 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.

Johann Friedrich Blumenbach, *The Anthropological Treatises of Johann Friedrich Blumenbach*, tr. and ed. Thomas Bendyshe, London, 1865.

Marcelo Dascal. "One Adam and Many Cultures: The Role of Political Pluralism in the Best of Possible Worlds," in Dascal and Yakira (1993), 387–409.

Marcelo Dascal and Elhanan Yakira (Eds.), *Leibniz and Adam*, Tel Aviv, University Publishing Projects, 1993.

Peter Fenves. "Imagining an Inundation of Australians; or, Leibniz on the Principles of Grace and Race," in *Race and Racism in Modern Philosophy*, Ed. Andrew Valls, Cornell University Press, 2005, 73-89.

Pierre Gassendi. *The Mirrour of True Nobility & Gentility. Being the Life of the Renowned Nicolaus Claudius Fabricius Lord of Peiresk, Senator of the Parliament at Aix*, tr. W. Rand, London, J. Streater, 1657.

Giuliano Gliozzi. *Adam et le Nouveau Monde. La naissance de l'anthropologie comme idéologie coloniale: des idéologies bibliques aux théories raciales (1500-1700)*, Paris, Théétète, 2000.

David M. Goldenberg. *The Curse of Ham: Race and Slavery in Early Judaism, Christianity, and Islam*, Princeton University Press, 2003.

Hugo Grotius. *De origine gentium americanarum dissertatio*, Paris and Amsterdam, 1642.

Matthew Hale. *The Primitive Origination of Mankind, Considered and Examined according to the Light of Nature*, London, 1677.

Johann Gottfried Herder, *Sämtliche Werke*, ed. Bernhard Suphan, Berlin: Weidmannsche Buchhandlung, 1877.

Johannes Hilpert. *Disquisitio de Praeadamitis, anonymo exercitationis & systematis theologici auctori opposita*, Amsterdam: Apud Johannem Janssonium Junioem, 1656.

Anton Hulsius. *Non ens prae-adamiticum, sive confutatio vani et sociniantis cujusdam somnii, quo S. Scripturae praetextu incautionibus nuper imponere conatus est anonus fingens ante Adamum primum homines fuisse in mundo*, Leiden, 1656.

Bartolomé de Las Casas. *Apologética historia sumaria*, ed. Edmundo O'Gorman, Mexico City, 1967 [1551].

Gottfried Wilhelm Leibniz. *Otium hanoveranum, Sive Miscellanea, Ex ore & schedis illustris viri, piae memoriae, Godofr. Guilielmi Leibnitii*, ed. Joachim Friedrich Feller, Leipzig, 1719.

---- ---- ---- ----. *Die philosophischen Schriften von G. W. Leibniz*, ed. C. I. Gerhardt. 7 volumes, Berlin, 1849-60.

---- ---- ---- ---- [Gotfrid Vilgel'm Leibnits]. *Sbornik pisem i memorialov Leibnitsa otnosyashchikhsya k Rossii i Petru Velikomu*, ed. V. I. Ger'e [Guerrier], Saint Petersburg, 1873.

----- . *Sämtliche Schriften und Briefe*. Edited by Deutsche Akademie der Wissenschaften. Darmstadt and Leipzig: 1923-present.

Martino Martini, *Sinicae Historiae Decas Prima*, Munich, 1658 [Amsterdam, 1659].

Gonzalo Fernández de Oviedo. *La historia general y natural de las Indias*, ed. José Miranda, Mexico City and Buenos Aires, 1956.

Buckner H. Payne [Ariel]. *The Negro: What Is His Ethnological Status?*, Cincinnati, 1867.

Isaac La Peyrère. *Relation de l'Islande*, Paris: Louis Billaine, 1644.

----- . *Prae-Adamitae, sive, Exercitatio super versibus duodecimo, decimotertio, & decimoquarto, capitis quinti Epistolae D. Pauli ad Romanos : quibus inducuntur primi homines ante Adamum conditi*, Amsterdam, 1655.

----- . *Men before Adam, or, A Discourse upon the Twelfth, Thirteenth, and Fourteenth Verses of the Fifth Chapter of the Epistle of the Apostle Paul to the Romans: By which are Prov'd that the First Men were Created before Adam*, London, 1656.

Philippe Le Prieur. *Animadversiones in librum Prae-Adamitarum, in quibus conglutatur Nuperus scriptor, & primum omnium hominum fuisse Adamum defenditur*, Paris: Ioan. Billaine, 1656.

Anthony Pagden. *The Fall of Natural Man: The American Indian and the Origins of Comparative Ethnology*, Cambridge University Press, 1982.

William Poole. "Seventeenth-century Preadamism, and an Anonymous English Preadamist," in *The Seventeenth Century* 19 (2004): 1-35.

Richard H. Popkin. *Isaac La Peyrère (1596-1676): His Life, Work, and Influence*,
Leiden: Brill, 1987.

----- "Leibniz and Vico on the Pre-Adamite Theory," in Dascal and Yakira
(1993), 377-386.

Thomas Sprat. *History of the Royal Society of London. For the Improving of Natural
Knowledge*, London, 1667.

Siep Stuurman. "François Bernier and the Invention of Racial Classification," in *History
Workshop Journal* (2000): 1-21.