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A prodigious bodily nature. Debates on albinism 1609-1745

Enrico Pasini

Abstract

From Spanish and Portuguese travelers to Maupertuis, the problem of *albinos*, or 'white Negroes', as they would be called, has been an epitome of strangeness, a disturbing and/or marvelous appendix to human essence, and has often been instrumental to various definitions of identity. Some major historical and cultural episodes concerning the intellectual statute of albinism will be sketched, culminating with the famous 18th-century debates and in particular with Maupertuis' studies of hereditary phenomena. At this time, new understanding of albinism would be part of a deep change in the meaning of 'nature', in the centre of a major scientific development that disconnects nature (and essence) from the stability of species and races, and that will shift the focus from stability to variability.

"parmi d'autres enfants tout nus était assis un petit albinos; sa peau décolorée ne paraissait pas naturelle" (Simone de Beauvoir, *La force des choses*, 1963, 237)

Albinism, in the present view, is a defect—of genetic origin—of melanin production or distribution that results in the well-known deficiency or absence of pigment in the skin, hair, and eyes, often accompanied by short-sightedness and sensitivity to light. But Albinos, or 'white negros', as they would be called, have been centuries long an epitome of strangeness. Having been, in ancient times, principally an item in a catalog of wonders, in the Early-Modern Age they became a disturbing and/or marvelous appendix to human essence ²—the 'other *other'*, *l'autre autre*, as Roger Little (1995) has quite aptly worded it.

1. When Leucoaethiopes were a people

It begins as a simple piece of geographic information. Pomponius Mela, Ptolemy, and Pliny described a race of 'white Ethiopians', although in doing so they "do not give enough information for us to judge whether albinos are meant or not" (Hilton 1998, 85). Pomponius Mela wrote that near the territory of the Gaetuli, on the shores washed by the Lybian Sea, Aegyptians and White Aethiopians dwelt: "At super ea quae Libyco mari adluuntur Libyes Aegyptii sunt et Leucoaethiopes" (*De situ orbis*, I, 23). The same is found in Pliny:

¹ "Albinism: General term for a number of inherited defects of amino acid metabolism in which there is a deficiency or absence of pigment in the eyes, skin, or hair". This is the NIH definition as quoted by Parker and Parker 2003, 137.

² For a sometimes concise but overall very comprehensive review of classical and Early-Modern sources, see chapters 2-4 of Pearson, Nettleship and Usher (1911, 11-196). Extremely useful is also Mazzolini 2006. On perspectives on albinos inner to African society, see Dodonou 2011, Baker *et al.* 2010. See also Krappe 1944. The standard text on ancient views of black people and of the various skin colors is Snowden 1970.

"Interiore autem ambitu Africae ad meridiem versus superque Gaetulos, intervenientibus desertis, primi omnium Libyes Aegyptii, deinde Leucoe Aethiopes habitant. Super eos Aethiopum gentes Nigritae a quo dictum est flumine" (*Nat. hist.*, V, §43).³

Also Ptolemy declared that "below the Rysadius mountains are the Leucaethiopes $(\Lambda \epsilon \nu \kappa \alpha \theta (\sigma \epsilon \zeta))$ " (Geog. 4, 6; 1932, 105). The neutral factuality of those concise statements about locations and peoples' names, however, was transformed by later compilers into the evocation of a population of such strangeness, to be ranged together with other similar items as headless men with the eyes in their chest.

For Greek and Latin writers, Blacks already had their share of intrinsic strangeness: who could ever believe in the existence of the Ethiopians, asked Pliny, before seeing them? "Quis enim Aethiopas ante quam cerneret credidit?" (*Nat. hist.*, VII, §6). Absolute whiteness, moreover, had its own strangeness. The same Pliny touches on 'Albanians' (*Nat. hist.*, VII, §12), who would seem to take the name from their complexion (white hair and white eyes that see better at night)⁴, and on a people called *Pandae*, who are born with white hair and get black with age (VII, §28).

Now Ethiopians exactly illustrated blackness of color, 'black' being interchangeable with 'Ethiop'. Their inversion—White Ethiopians, that is, if one may say so, white Blacks—was plainly worthy of mention in such catalogs, as any inversion of a standard blackness would be: "corvo quoque rarior albo", rarer than a white crow, as Juvenal (*Sat.*, VII, 202) had said it. Martianus Capella summarized so the matter:

"Interior autem Africa ad meridiem versus intervenientibus desertis habet Leucaethiopes, Nigritas et ceteros monstruosae novitatis [...] Troglodytae in specubus manent vescunturque serpentibus striduntque potius quam loquuntur. [...] Blemmyae sine capite sunt atque os et oculos in pectore gerunt. [...] Pharusi comites Herculis fuere, post hos finis est Africae". (*De nupt.*, VI, §673)

Inner Africa was "the abode of the White Ethiopians, the Nigritae, and other people of monstruous strangeness" (Stahl and Johnson 1977, 252). Thus Capella was instrumental in transmitting a collection of drawn from the said Pomponius Mela and Pliny, or from Solinus. Still in the late 18th century Christoph Martin Wieland, in his *Abderiten*, would satyrize with purposely similar expressions a sort of naive and parochial interest in commonplace exotic monstrosities. So the Abderites wanted globetrotter Democritus, after he came back from his travels, to tell them of giants and dwarfs, of the dog- and donkey-headed men, of green-haired sirens and blue centaurs, and, of course, of 'white negroes':

"Man erwartete, daß er von zwölfellenlangen Riesen und von sechs Daumen hohen Zwergen, von Menschen mit Hunds- und Esels-köpfen, von Meerfrauen mit grünen Haaren, von weißen Negern, und blauen Centauren sprechen würde". (Wieland 1744, 31)

Democritus swore them, to no avail, that he had not seen anything like that: "Demokritus schwur vergebens, daß er von allen diesen Wundermenschen in Aethiopien und Indien nichts gesehen noch gehöret habe" (Wieland 1744, 33). In the 1770s *Wundermenschen*, wondrous peoples, could be declared extraneous to the experience of a reasonable traveler. Indeed, in the

³ This part depends likely, as it is often the case with Pliny, on Greek sources that might be common to him and Mela (Detlefsen 1908, 36-37).

⁴This passage is reproduced by Aulus Gellius, *Noct. Att.* IX, 4, and Solinus, *De mirabilibus mundi*, chap. 15. From then on, 'Albanians' are often mentioned among instances of nyctalopia. On Caucasic Albania in the classical sources, see Bais 2001, Traina 2015.

⁵ The distinguishing mark of an Ethiopian was the color of his skin. [And] Ethiopians were the yardstick by which antiquity measured colored people" (Snowden 1970, 2). Crossings might be called 'decolored', *discolores*, or *decolores*. See also Johnson 2006.

⁶ As for sources and influence of his depiction of inner Africa see Stahl and Johnson 1971, 138-40.

meantime a complete reversal of both the image and the concept of 'white Negros' had been taking place: a century-long and complex development, the phases of which will be the subject of the present historical sketch.

2. Proverbiality and deviation

The blackness of Ethiops acquires in time a proverbial quality, as testified, *e.g.*, by Erasmus' *Adages*. In this most learned of all Early-Modern Latin books, they appear clad in their inescapable black: quintessential is 'You wash an Ethiopian white',⁷ that is, you are attempting an unrealistic or downright impossible task (the following sayings comprise 'You write in water', 'You build on sand', etc.). Similar is *Aethiopem ex vultu iudico*, 'I judge an Ethiopian by his face'. "For an Ethiopian indicates by his black face, curly hair, thick lips, and gleaming teeth where his native country is. An Ethiop may change his clothes, but his face he cannot change [*vestem mutare potest Aethiops, faciem non potest*]" (*Adag.* 838; CWE 32, 202).

To resume: *Aethiops non albescit* (*Adag.* 2988), that is, apodictically, 'The Ethiopian does not become white'. This is telling, and not only on the ethnographic level. On the one hand, Erasmus is open to a certain kind of relativity:

"The Spaniard is not unhappy because he has not got fair hair, nor the Indian because he is dusky, the Ethiopian because he is black and flat-nosed [non Indus quod colore sit lurido, non Aethiops quod atro, quod simis naribus]; so why should you make yourself miserable and be unable to accept meekly the reproach of not being a Ciceronian?"

This is not to be taken for granted at the time: quite an opposite attitude is well represented, *e.g.*, by the complacency displayed by Ludovico Vartema, in his *Itinerario*, in telling the story of his purported encounter with the black queen of Arabia Felix that ached for having a white son, and thus repeated: "O God, thou hast created this man white like the sun, thou hast created my husband black, my son also is black, and I am black. Would to God that this man were my husband. Would to God that I might have a son like this man". The *Itinerario* was translated into Latin in Grynäus' *Novus orbis regionum* and so gained European diffusion:

"Nudum voluptuosius illa me geminae horae spatio intuebatur, nec a me aciem oculorum unquam avertebat, me observans utinam Cupidinem quempiam, querebaturque, deos incusans his ferme verbis, O deus hunc creasti sole candidiorem, e diverso autem coniugem meum, meque ac natos meos omneis nigricantes formasti: utinam hic meus coniunx foret: item superis placeret, ut natum huic non absimilem haberem". (Grynäus 1532, lib. II, cap. 6; 215)

On the other hand, Erasmus steadily maintains an association of white and purified, black and villanious, that is hinted at in his explication of the adage on the Aethiopian's face: "This will be particularly apposite when a matter of doubtful morality is decorated by a gloss of words, or when praise is given to one who does not deserve praise" (CWE 31, 357); 10 but it becomes

⁷Both Aethiopem dealbas and Aethiopem lavas (Adag. 350) express the same idea, on which see Faloppa 2013.

⁸ Ciceronianus, CWE 6 429-30, ASD I-2 692.

⁹ It is translated so in Vartema 1863, 69. In the original version, Vartema reproduced phonetically the discussion in Arab: "Et io per contentarla me levai la camisa & ponendome la davanti per honestà & così me teneva due hore davanti a lei standome a contemplare come se io fussi stato una nympha & faceva una lamentatione inverso Dio in questo modo: *Ialla in te sta cal ade abiat me telsamps in te stacal ane auset: Ialla lanabi iosane assiet: Villet ane auset ade ragel abiath Insalla ade ragel Iosane insalla oet bith mit lade* cioè 'o Dio tu hai creato costui biancho come el sole e 'l mio marito tu lo hai creato negro: el mio figliuolo anchora negro, & io negra. Dio volesse che questo homo fusse el mio marito: Dio volesse che io facesse uno figliuolo come è questo" (Vartema 1535, c. 23v).

¹⁰He builds, of course, on a traditional opposition that sees white as happy and positive, and black its opposite, as in the saying *albo / nigro lapillo signare* (on which see Ruiz de Elvira 2003). Erasmus himself had at first used it in the *Adagiorum collectanea* (*Dies albo lapillo notandus*, *Collect*. 664; ASD II-9, 230). It will be

plainly clear, f.i. in the expressions used to recount the conversion of the Ethiopian eunuch (*Acts* 8:26-40) in the letter to the readers that is prefaced to Erasmus' *Paraphrase on the Gospel of Matthew*, where the 'race' of Ethiopians is dubbed the most effeminate and, through conversion, not only—metaphorically—the eunuch returns a man, but the Black is coated white in the fleece of the immaculate Lamb:

"Quid alienius a mysteriis Prophetarum, quam Eunuchus ille Candaces Reginae, in regia nutritus, muliebribus obsequiis addictus, denique Aethiops, qua gente vix ulla effeminatior [...] vertitur Eunuchus in virum tingitur aqua, et ater Aethiops niveo agni immaculati vellere induitur". (LB 7, fol. **3v)

Such moral opposition is echoed in the widespread theory of the origination of black peoples as retribution for an offense committed in biblical times. A few years after, in chapter 17, "Rerum quae in Chamesia, Africave, tam loco quam tempore fuere, σ ύνο π σιζ", of his *Cosmographiae compendium*, Guillaume Postel investigates, so to say, the source of skin darkness. Blackness, he maintains, cannot be connected to the intense sun of tropical regions; although it is prevalent near the equator, in fact, whiteness—and of a permanent kind—is not absent from those lands:

"Quum videantur atro admodum colore homines maxime sub aequatore, et locis versus tropicos vicini, ita ut mixti iam sint ubique inter albos, et multi albi sint et perseverent omnibus seculis in sua albedine: certissimum est, originem nigredinis non a regione (ut hactenus est putatum) ob solis ardores, sed a stirpe et sanguine promanasse hunc colorem". (Postel 1561, 92)

The purported existence of stable, natural Whites in Ethiopia confirms the intrinsicalness of the color of Black Ethiopians, which, consequently, is not due to the external influx of circumstances. There are no blacks, conversely, in the new lands of Atlantis, *i.e.* America, just as there are no blacks in Sardinia, nor in Persia or Spain, where indeed it is very hot in summer. But the cause of the natural blackness of Ethiopians is not merely 'natural'. Instead, it arose when the fault of Ham—it is said that he did not abstain from his wife while on the Ark—was punished with a 'miserable' black-skinned offspring:

"Credamus igitur necesse est secretae Hebraeorum traditioni, qua aiunt, ex albo parente Chamese (sicuti et Iapetus et Semus erant albi) procreatum fuisse cum tali scelere filium post diluvium primo ex ipso genitum, ut in sceleris parentum argumentum nigro colore miserandus puer natus sit". (Postel 1561, 93-94)

The Ethiopians should be descended, by divine retaliation, from this impressive opposite of an albino birth, in which a previous nature is suddenly, but in this case also persistingly, reversed: "Hinc ad inobedientiae et contemptus divini indicium, Deus Chussum filium atro colore voluit nasci, unde stirpe caeteri descendunt Aethiopes" (Postel 1561, 94-95). Hence their Biblical name, from Cush, that black eldest son of Ham; hence the biblical archetype of one of Erasmus' sayings, *Si mutare potest Aethiops pellem suam*, a verse from the Book of Jeremiah, for rendering which, since the 18th century, some English writers recover the 'original' diction *Cushite*:

"because it appeareth from Jer. XIII. 23. that the Cushites were black, or at least deep tawny coloured. For, says the Prophet, Can the Cushite (so it is in the Original) change his Skin or

absorbed into Adag. 453, Album calculum addere et similes figurae, and 454, Creta notare. Carbone notare. Of the moral nuance Erasmus is perfectly aware, as made clear by his explanation of Novit quid album, quid nigrum: "Duplicem in sententiam accipi potest. Aut novit discrimen recti pravique aut novit id, quod nemo vel indoctus ignorat" (Adag. 598; ASD II-2, 124).

¹¹ "Si mutare potest Aethiops pellem suam, aut pardus varietates suas, et vos poteritis bene facere cum didiceritis malum" (*Jer.* 13:23). See Sadler 2005.

the Leopard his Spots, then may ye also do good who are accustomed to do Evil. And, therefore, probably, Arabia Felix was a Part of the Dominions of Cush". (Clayton 1752, 81)

After reading this, it will not seem strange that the ethical opposition of white and black can be used, at the time, even as a sort of moral paradox. A kind, again, of cruel proverbs were common then, but not on Ethiopians: on the people of Genua, instead—of the 'proud' Maritime Republic of Early-Modern Italy. Ortensio Lando in his *Commentario delle piu notabili e mostruose cose d'Italia* of 1548 remarks: "Quivi mostruoso mi parve veder montagne senza legna, mar senza pesce, donne senza amore e molti mercatanti senza fede" (Landi 1994, 42). The saying is reported in various versions, mostly similar, ¹² but an important variant is mentioned, among others, by Fynes Moryson in his *Itinerary*:

"Of Genoa it is said Mar' senza pesci, montagne senza legni, huomini senza fede, Donne senza vergogna, Mori-bianchi, Genoa superba. That is: The sea without fish, Mountaines without wood, Men without faith, Weomen without shame, white Mores, Genoa the proud" (Moryson 1617, 52).

Also Mateo Aléman in the *Guzman de Alfarache* (III, 5) recounts that the inhabitants of Genoa were called "by way of Nick-name, *Moros blancos*, white Moores" (Aléman 1623, 1:209), and this because of their merchants, who were, the English translator interpolates, harsh usurers. It seems indeed that Genuans were proverbially dubbed 'white Moors' to imply that they were cruel like the Moors ('like Turks', it would also have been said at the time), but of white complexion—as if saying: no white Moors exist, but such would certainly be, for their harshness, these people.

This paradox, in its startling connexion of a presumption of irreality with a color-coded implicite moral reproach, complements and brings one step further the opposition we have shown at the examples of Erasmus and Postel. It tinges the problematic character of white blackness with the ominous features of moral monstrosity. Appropriately, so to speak, a tendency to designate them monsters emerges, roughly at the same time, also in physiology.

3. Collective monstruosity as natural monstruosity

Ulisse Aldrovandi, in his famous *History of Monsters*, presents an interesting example. Alongside with *Foetus bicorpor humanus et serpentinus*, or *Foetus bicorpor humanus et caninus* (double-bodied fetuses, of partly human, partly canine or snakelike appearance), he has a pair of conjoined twins, one black and one white: "Foetus bicorpor complicatus Aethiops, et Albus" (Aldrovandi 1642, 636-37), that he describes so:

"Non valde absimilis sed recentior monstri nativitas contigit Regij, mense Novembris anni post millesimum, et sexcentesimum decimiquinti. Monstrum erat bicorpor utroque sexu refertum, duo erant Gemelli Aethiops et albus coniuncti ventre, thorace, et unico umbilico, caeteris partibus perfecti, qui quodammodo in mutuis amplexibus esse videbantur. Tres horas tantummodo vixerunt". (Aldrovandi 1642, 637)

Of course, the anatomic monstrousness prevails over the different colors of the twins. But it is remarkable that this difference is expressed in classical terms: one had, as it were, the bodily nature of an Ethiop, the other of a White; and this union is formulated just as the conjonction of animal and human bodily natures is in other cases. That is, also in the case of skin color, monstrosity and a constant, in itself immutable nature, show to be mirrorlike-tied as much as they are opposed.

In Postel, as we saw, the birth of Ham's black son is considered as a divine infliction, a miraculous and unique aberration which reverses a previously existing and 'normally' stable

¹² "Il court en Italie un proverbe peu honorable aux Génois, on définit ainsi leur Pais, Montagne senza Legni, Mare senza Pesci, Huomini senza Fede, Donne senza Vergogna" (Martinière 1732, 117).

nature. Its reverse, the birth of white individuals from black parents, can instead be ranged together with other monstrous births, and, in this way, be normalized. Heliodorus of Emesa (*Aeth.*, VII) had told the story of a princess born white of black royalties. Ambroise Paré recalls the episode in his famous *De monstres et prodiges*, to confirm his (and many others') idea that the principal reason of monstruous births is the imagination of the mother:

"Whether true or not, Heliodorus [...] writes that Persina, the Queen of Ethiopia, conceived by King Hidustes-both of them being Ethiopians-a daughter who was white and this occurred because of the appearance of the beautiful Andromeda that she summoned up in her imagination, for she had a painting of her before her eyes during the embraces from which she became pregnant". (Paré 1982, 38)¹³

The matter, as it is well known, was subject of controversies up to the 18th century. The theory of the power of imagination was sharply criticised in hefty debates and James Blondel (1729, 39) wrote: "As for Heliodorus, he was a Bishop, who made it more his Business to write Romances, than to preach the Gospel. He thought, this Fable a proper Episod to beautify his Work". Nonetheless the power of imagination was still invoked as an explanation for the birth of white Negros by Claude Nicolas Le Cat in his *Traité de la couleur de la peau humaine* of 1765.¹⁴

Thus rarities of the Ancients became monsters of the Moderns—or, at least, they might have to be explained, at least by Early Moderns, in the same line. In the 17th century the Roman physician Paolo Zacchia, who founded modern medical jurisprudence with his *Quaestiones medico-legales*, noted that monsters had no univocal definition: "Sed quid sit Monstrum diversimode multi docuerunt" (Zacchia 1660, 469). One important element in such difference of opinion was the status of, so to speak, 'natural' monsters. The Italian jurist Alberico Gentili, who had been teaching law in England since 1587, in his learned work *On the Meaning of Words in the Digest*, commenting on Ulpianus's definition of *contra naturam* monsters and prodigies, remarked: "si a natura monstrosae quaedam gentes, cur non et partus monstrosi?", that is: since there are 'monsters' that come from nature and form entire peoples, also monstruous births could come from nature; and he wrote further, listing the different sorts of monsters:

"Adde quod medici faciunt quinque monstrorum genera, primum hoc, quando integrae gentes tales sunt, ut monoculi, similes; de quibus Plinius, alii; secundum cum excessus staturae est, ut gigantis, pumilionis; tertium, cum quid deest, vel superest, ut si tria brachia, si duplex sexus, ut hermaphroditorum etc. Quartum si aliquod monstrum brutorum sit; quintum si totum bruti, aut fere totum. Ostendi, monstrari, portendi, praedici. Inde ostenta, monstra, portenta, prodigia". (Gentili 1614, 99)

Among the five kinds of monsters between which physicians discriminate, the first comprises precisely those people on which Pliny related. This will be repeated by Zacchia, who refers to works by Luís de Mercado (1588), Rodriguez de Castro (1617), Caspar Bauhin (1614); and he even touches on the existence of monsters *secundum naturam* not only according to classical

¹³ From the first edition of *Des monstres*, that will become the *Livre XXV Des monstres et prodiges* of his works, in the *Chap. IX. Exemple des monstres qui se font par imagination*: "Qui soit vray, Heliodore escript que Persina, Royne d'Ethiopie, conçeut du Roy Hidustes, tous deux Aethiopiens, une fille qui estoit blanche, et ce par l'imagination qu'elle attira de la semblance de la belle Endromeda, dont elle avoit la peinture devant ses oeils, pendant les embrassements desquels elle devint grosse" (Paré 1573, 427-28). See also Mazzolini 2006. The matter was still subject of controversies in the 18th century: "As for Heliodorus, he was a Bishop, who made it more his Business to write Romances, than to preach the Gospel. He thought, this Fable a proper Episod to beautify his Work" (Blondel 1729, 39).

¹⁴ He also proposed an up-to-date physiological explanation for the connection of imagination and melanin (which he called *oethiops animal*; see Le Cat 1765, 110-11).

sources, but to modern ones as well, that is, according to the histories of travels and explorations of faraway lands:

"quinque Monstrorum genera constituerunt, unum eorum, quae a Natura, et secundum Naturam ipsam sunt; in quo comprehendunt nationes omnes, quae notabili aliquo vitio insigniuntur, ut praeter quamplures Populos, de quibus Plin. lib. 6 *Nat. Hist.* cap. 37 et alibi, et Strabo *Geograph*. lib. 2. sunt qui a nonnullis recentioribus historicis fide dignis enarrantur, quales sunt ii, quos canina capita habere, et alii, quos caudatos esse, aliisque enormibus figuris insigniri recenset Sigismund. *Liber in commentar. Moscou.* et alii, de quibus multi historici de rebus indicis scribentes". (Zacchia 1660, 471)

This is all quite generic, admittedly, but it is apparent that in contemplating the possibility of 'monstrous' populations, even this hard-boiled medical consultant of the Sacra Rota reveals an interest in the relation of monstrosity and aberration to 'nature'. This passage intimates, to our eyes, that for him and his contemporaries the definition both of nature and of aberration would be confronted with the widespread curiosity about the 'new' populations, and also suggests implicitly how much those definitions might be put in jeopardy by, as we might say, aberrant aberrations. Was not, in fact, this opposition and entanglement of white and black, all this complex of history, ethnology and morality, again, to be reversed and shaken by so strong a deviation, as 'white Aethiopians' would necessarily be? While the Ancient world seems able to accomodate variety, the Early Modern, who inherited a much more fixed image of the world, see this very image, as all know, more and more shaken in their time. As we are going to see, color becomes a matter of profound interest, as any discovery will contribute to refine and, at the same time, unsettle some accepted depiction of human nature, whereas deviations, more and more, cannot so easily be treated as monsters.

4. Color, nature and complexion

One of the first historians of the discovery of America, Peter Martyr, reports in his *Decades* on the New World that Columbus positively declares he never went off the parallel of Ethiopia; thus the physical differences between the inhabitants of the New World and the Ethiopians must not be attributed to the climate, that is to say, to the latitude itself, but rather to the different character of the land and soil:

"Quoniam se ab Aethiopiae parallelis nunquam exijsse in tota ea navigatione pertinaciter Almirantus affirmat, tantaque sit in utriusque terrae incolis, continentis scilicet Aethiopiae et insularum, naturae varietas: Aethiopes enim nigri, crispi, lanati, non autem capillati: hi vero albi, capillis oblongis, protemtis, flavis. Unde discrimen hoc tantum oriri possit alias, non video, Terras igitur dispositio, non caelorum status, eam causatur varietatem" (Martire 1533, 15C).

Martyr was eager to repeat the commonplace according to which beauty canons are relative: "Existimat Aethiops nigrum colorem candido pulchriorem. Putat et candidus aliter" (Martire 1521, 32). He did not point to any moral inferiority in them; indeed, his idealized picture of their way of life would become quite famous: with them the earth was common like the sun and water, and the seeds of all evils—the ideas of 'mine' and 'yours'—had not fallen among them. They were content with little, enjoyed a golden age, and lived with no walls, in open gardens. Unencumbered by laws, books, and judges, they cultivated justice, this most human of virtues, out of their nature:

"Compertum est apud eos, velut solem et aquam, terram esse communem, neque Meum aut Tuum, malorum omnium semina, cadere inter ipsos. Sunt enim adeo parvo contenti, quod in ea ampla tellure magis agri supersint, quam quicquam desit. Aetas est illis aurea, neque fossis, neque parietibus aut sepibus praedia sepiunt. Apertis vivunt hortis. Sine legibus, sine libris,

We can surmise that his interest in the issue of the natural origin of their color, and of the difference from other non-white peoples, was genuine. This sets him near another chronicler of the *Conquista*, who has nonetheless an opposite attitude to the inhabitants of the new world, i.e., Francisco López de Gómara, the historian of the *conquista*, of which he offered both the first chronicle and an edifice of juridical and ideological justification.

Gómara scrutinized the matter of the color of the Americans in his *Historia general de las Indias* (1552). Color was the only feature that distinguished them 'from us', he wrote. Although they were progeny of Adam, according to him, and thus not monstrous beasts but humans, he deemed them polygamic cannibals, idolaters, sodomitic worshipers of the Devil, and so on. Thus the New World, inhabited by new animals and plants, separate enough from the Old that no previous hereditary rights could be brought forth against the rights of discovery, was yet not so 'different' that it be impossible to conquer it by force, sons of Adam against sons of Adam in a Christian war on barbarian peoples:¹⁵

"Empero los hombres son como nosotros, fuera del color, que de otra manera bestias y monstruos serían y no vendrían, como vienen de Adán. [...] Y como no conocen al verdadero Dios y Señor, están en grandísimos pecados de idolatría, sacrificios de hombres vivos, comida de carne humana, habla con el diablo, sodomía, muchedumbre de mujeres y otros así" (Gómara 1979, 1:7)

As said, in despite of such vices they were also for him 'men like us', the color apart. So it is no surprise that to the latter argument, *Del color de los Indios*, a whole chapter was devoted, not devoid of a quite naturalistic perspective, albeit inside a theological framework:

"CCXVI. Del color de los Indios. Una de las maravillas que Dios usó en la composición del hombre es el color; y así, pone muy grande admiración y gana de contemplarlo, viendo un hombre blanco y otro negro, que son del todo contrarios colores" (Gómara 1979, 1:308)

Peter Martyr's *Decades* were partially translated into English in 1555, and the translator, Richard Eden, added to Martyr's text some more recent materials that he drew from Gómara's works. Among the passages he reproduced was the entire chapter *Of the colour of the Indians*; the opening passage, with its ample considerations of the variety of human complexions, reads so:

"One of the marueylous thynges that god vseth in the composition of man, is coloure: whiche doubtlesse can not bee consydered withowte great admiration in beholding one to be white and an other blacke, beinge coloures vtterlye contrary. Sum lykewyse to be yelowe whiche is between blacke and white: and other of other colours as it were of dyuers liueres. And as these colours are to be marueyled at, euen so is it to be considered howe they dyffer one from an other as it were by degrees, forasmuche as sum men are whyte after dyuers sortes of whytenesse: yelowe after dyuers maners of yelowe: and blacke after dyuers sortes of blackenesse" (Gómara 1555, 310).

The Indians' color, intermediate between white and black, is not a tan. It is due, instead, to their nature: "y este color es por naturaleza, y no por desnudez, como pensaban muchos, aunque algo les ayuda para ello ir desnudos". Gomára repeats the argument brought by Peter Martyr, that people of disparate color are found at the same latitude. Thus the cause of their color is not the different nature of soils and lands, or the climate, but the very nature of the people, of the different sorts of humans, ordained by the Creator to show, in this variety, his wisdom and power:

¹⁵ The historical motives of this position and the hefty debates of the 16^h century that surrounded it are masterly analyzed in Gliozzi (2000, part II, chapter 1).

"bien que no sabemos la causa por qué Dios así lo ordenó y diferenció, mas de pensar que por mostrar su omnipotencia y sabiduría en tan diversa variedad de colores que tienen los hombres. También dicen que no hay crespos, que es otro notable, y pocos calvos, que dará cuidado a los filósofos para rastrear los secretos de natura y novedades del Mundo Nuevo, y las complisiones del hombre" (Gómara 1979, 1:308-309).

The last phrase, interestingly, was translated by Richard Eden as it were a separate utterance, referred to the whole matter of the chapter. He also reordered its parts, making it much more general, an arrangement that he perceived most likely to render the real meaning and intention of the Spanish author:

"All whiche thynges may give further occasion to phylosophers to search the secreates of nature and complexions of men with the nouelties of the new worlde" (Gómara 1555, 311).

Secrets of nature and human complexions are thus knit together as the necessary object of philosophical investigations, that would stem, in these passages that seem to proclamate an unprecedented urgency, chiefly from the diverging pigmentations of newer and newer populations that European travelers, explorers, merchants, historians and intellectuals are, as it were, chancing upon. Precisely in connection with these encounters, but also within the impulse of these intellectual attitudes and needs, the Early-Modern history of the detection of the 'albinos' has its start.

Yet *Leucoaethiopes* and *albos Mauros* remained for a long time the reference names for African populations of lighter complexion. For instance, in Simon Grynäus' collection of travel histories, among the various translations there was also the report of Alvise Cadamosto's voyage to Western Africa, that had been published in Italian by Fracanzio da Montalboddo in 1507. When he arrived to relate of the Senegal River, that presently forms the border between Senegal and Mauritania, *i.e.* between the *regnum Senagae* and the *regnum Aethiopiae*, "praecipuum flumen regionis Nigritarum introrsus per hoc latus" (Grynäus 1532, 18), Cadamosto stated that the inhabitants on the two sides were strangely different in complexion, very black and statuary on the one side, palely grey and short on the other:

"Id ante omnia miratu dignum est, quod trans flumen memoratum, homines sunt nigerrimi, et procerae staturae, ac habilissimi corporis: et omnis illic regio viret, ac vernat pomiferis arboribus referta. At citra fluvium contrarias vices cernas, videlicet homines subcinericij coloris, staturae contractiores" (Grynäus 1532, 20).

In the successive chapter 16, *Nigritarum habitus et fides*, he added that the Blacks were not so imbued with the Muslim faith as the White Moors were: "Mahumetem primi Nigritae colunt: non tamen adhuc pertinaces sunt in ea fide ut Leuco Aethiopes, quos Mauros albos appellant, praesertim gregarij" (Grynäus 1532, 20). We might remark that, in the Italian original, Cadamosto had only written *Mori bianchi*.¹⁷ Maybe this is a symptom that a new name was needed; and it in fact had appeared, at first as an informal denomination, and without any known inceptor.

¹⁶ They might even be confused with Troglodites, as testified by Raffaele Maffei da Volterra, who hastily wrote in his *Commentaria*: "His proximi Troglodytae, qui sub terris in cavernis ob nimios calores agunt [...] Hos Plinius Leucoethiopas, Donysius et Homerus Erembos vocant" (Maffei 1552, col. 363).

¹⁷ Rio de senega disiungente la terra arenosa da la fertile. capitulo xiiii: "& maraviglosa cosa mi par che dela dal fiume tuti sonno nigrissimi & grandi & grossi & ben formati de corpo e tuto el pase e verde & pien de arbori & fertile: & de qua sonno homini beretini piccholi: & el pases sterile & seccho" (Montalboddo 1507, c. d ii v); Habito de Nigri: & la lor fede. c. xvi. "La fede de questi primi Nigri sie Macometani. Ma non sonno pero ben fermi ne la fede come li Mori bianchi, e maxime al populo menuto" (c. d iv r).

5. A name and its meaning: New Guinea and Ethiopia

Both Álvaro de Saavedra Cerón, who touched the coast of New Guinea in the 1520s, and Yñigo Ortiz de Retez, who sailed in 1545 along the northern coast of the island, were striken by the similarity of the inhabitants to the black Africans that inhabited the Guinea coast:

"The Spaniards found traces of gold all along this part of the country, and Saavedra named the island Isla del Oro, the Island of Gold; but his description of the natives, whom he found to be black, with short crisped hair or wool, similar to those of the coast of Guinea in Africa, gave rise, no doubt, to the alteration in the name, for at a later date the island became known as *Nova Guinea*, or New Guinea" (Collingridge de Tourcey 1906, 13).

In a Relación escrita y presentada al Emperador por Andrés de Urdaneta de los sucesos de la armada del Comendador Loáisa, desde 24 de Julio de 1525 hasta el año 1535, we read accordingly: "Al Leste desta dicha isla de Batachina, hay otras muchas islas que se llaman los Papuas, y la gente dellas son todos negros, de cabello revuelto como guineos, é todos son flecheros. Destas islas llevan oro á Bachan, aunque es poco, empero es fino" (Navarrete 1825, 436; my it.), that is, as Raleigh summarized it apropos the 1545 expedition: "And because the people there were blacke and had frilled haire, they named it Nueva Guinea" (1596, 96). It is in relation to these Ethiopians of the Pacific Ocean that, in 1609, the first communication to the European public concerning white individuals born among a black population got into print. In the same occasion it was also mentioned that the Spaniards called these people albinos. Bartolomé Leonardo y Argensola, imperial chapelain, published that year a volume on the Conquista de las Islas Malucas. The work contained also many news concerning the recent discoveries in the Melanesian area, where Spanish explorers were in direct competition with the Portuguese: as he wrote, "no deve el titulo precisamente contener toda la materia del libro" (Leonardo y Argensola 1609, [Preface], n.p.). In the second book, in particular, under the marginal title "Grandeza de la Isla de los Papuas", the following notices on the indigenous of New Guinea were to be read:18

"En medio de tan negra gente ay alguno tan blancos y rubios como los Alemanes. Estos saliendo al sol, aunque no lo miren, quedan ciegos. En España los llamamos Albiños, bien que algunos nacen fuertes, y habiles para ver qualquier objeto" (Leonardo y Argensola 1609, 71C)

One century later, the French translator still felt the need to explain this exotic locution: "Nous les nommons en Espagne Albinos, à cause de leur blancheur" (Leonardo y Argensola 1707, 1:148). In a slightly imprecise English translation of the beginning of the 18th century, the passage sounds so:

"Among these Black-men there are some as White and fair as the Germans; if these go out in the Sun, they are struck blind, tho they do not look at it. Those in Spain are call'd *Albinos*; yet some of them are strong, and can behold any object" (Leonardo y Argensola 1708, 49).

Plainly, even though the name for this disquieting complexion had seen the light, its precise character remained somewhat unclear. A further step was required, some addition: and soon it appeared, although in a different and for a long time separate line of diffusion. Baltazar Telles, a Jesuit missionary to Ethiopia around mid-17th century, has been often credited for

¹⁸ There were few printed sources available on the Papua Island, and Arensola must have used direct contacts and private documents. Quiros presented his *memoriales* to the king, some handwritten and others in print, in the same years (1607-1615). In his 5th Petition he listed with no distinction people of white color, brown, mulattos and indios (*i.e.* black), as well as the various mixtures. They may have black hair, long and loose, he said, or frizzy and curly; others have fair, thin hair; this variety is the sign of frequent dealings and encounters: "La gente de aquenas tierras es muche; sus colores son blancos, loros, mulatos e indios, y mezclas de unos y de otros; los cabellos de los unos son negros, crecidos y sueltos, los otro son frisados y crespos, y de otros bien rubios y delgados, cuyas diferencias son indicios de grandes comercios y concursos" (Queirós 1990, 194).

introducing the word 'albino', although he did not. But he first offered a description of white people in the land of the Blacks, that could fittily explain the nuance conveyed by the word. Moreover his subject were, in this case, proper White Ethiopians.

In 1660, Telles published a history of the Ethiopian missions ¹⁹ composed by his confraternal Manuel Almeida and extensively reviewed by himself. In his *Prologo ao Leytor* Telles declared the absolute truthfulness of the account, based on both direct witness and learned sources. ²⁰ He had consulted, among others, "Padre Pero Pays [...] primeyro apostolo d'esta Ethiopia" and "todas as cartas annuas, que nossos Padres da Companhia escrevéram d'esta Ethiopia"; finally, "os Commentarios curiosissimos do Reverendo Padre Ieronymo Lobo", whom he had also personally consulted, and whom we shall meet again (Telles and Almeida 1660, fol. §§ *Ir-v*). In sum, he was eager to declare his sources, so that all the new intelligence that he proposed on his subject would be backed up by their authority:

"Com tudo porque muytas d'estas materias forma muy controversas, e a muytos parecerám novas, eu posso dar minha palavra, firmada com juramento, que nam direy nestas materias de Ethiopia a Alta, cousa inventada pro mim mesmo, senam segundo a verdade das enformaçõens, tam apuradas, que hirey seguindo" (Telles and Almeida 1660, fol. §§1v).

In Ethiopia, he related, there are various people and sundry languages: Arab, Hebrew, although depravated as the customs of the local people are, and many others as diverse as Portuguese and French are.²¹ The inhabitants have different customs and aspects, but they are all nicely built, tall, and similar to the Europeans, although colored. Their colors are principally black, dusky, and olive brown, which are the most prized; others are reddish. Some are white, but it is a 'wan color', he says, 'and void of any grace':

"As cores ordinarias, sam preta, baça, azeitonada, e he a que elles mays estimam; outros sayem vermelhos, alguns sam brancos, mas he hum branco exangue, e sem nenhũa graça" (Telles and Almeida 1660, I, 15; 39).

Telles' opus enjoyed swift and durable renown. Two independent versions into French appeared, ²² and John Stevens took care of an English translation (*The Travels of the Jesuits in Ethiopia*, 1710). An overall Latin paraphrase of Telles' text was provided by Hiob Ludolf, the founder of modern Ethiopian studies, in his master work, the *Historia Aethiopica*, where he made vast use of it. He described the Ethiopians as not unpleasant and well-built, "ut idem Tellezius tradit", as Telles himself reports. Ludolf here translated into Latin Telles *ad verbum*, with the original text presented side by side with the translation in double column. So, "a gente de Europa" is expressed with "a nostratibus"; the passage on colors is rendered thus:

¹⁹On which see Cohen 2009.

²⁰ Differently from the ancient historians, "Quanto mays que eu tenho testimunhas de svista tam abonadas, que posso bem authorizar a verdade das minhas historias, com a infallibilidade de suas noticias" (Telles and Almeida 1660, c. §§*r*).

²¹ E assim como ha diversidade de gente, assim ha variedade de lingoa, porque os Mouros falam a sua lingoa Arabiga, os Iudeos a Hebréa, mas tam corrupta ja nos verbos, e nos nomes, como elles depravados na vida; e nos custumes [...] e quasi todas estas lingoas sam tam differentes entre sy, somo a Portugueza da Francesa, o u Italiana" (Telles and Almeida 1660, I, 15; 38-39)

²²One by Richard Lignon de la Borde (Lignon and Telles 1684), that contains an *Extrait de l'Histoire d'Ethiopie*, ecrite en portugais par le P. Baltasar Telles de la Compagnie de Jesus (an abridged translation of Telles' chapters 5, 6, and 7, from the English edition); and a *Description de l'empire du Preste-Jean*, with abridged extracts from the other parts, and in particular with the following rendering of the passages we quoted above: "On ne parle pas la même Langue par tout le Royaume: on en parle plusieurs qui sont aussi differentes que la Françoise et l'Espagnole. Les femmes y sont moins noires que les hommes: il y en a même quelques-une de blanches" (59). A much better translation had appeared in 1672, issued again every year for some time, bound together with the French translation of Lobo's relations of the unicorn and similar, more fascinating material (Lobo 1672, this part has separate pagination).

"Color illis est ut plurimum niger, fuscus vel mustellinus, quem illi maximi faciunt; nonnulli etiam rubicundi sunt: pauci albicantes: vel potius pallidi et exsangues; ingrata prorsus albedine" (Ludolf 1681, lib. I, cap. 14).

In his *Sciagraphia Historiae Aethiopicae*, where he had presented in 1676 the program of his later work, he already wrote: "Nonnulli subfusci, nonnulli et albicantes, sed palidi et exsangues sunt" (Ludolf 1676, cap. 14, §18; 18). Thus 'albicantes' was introduced as the official Latin rendering of 'Albiños', ²³ accompanied by that Tellesian formula, Latinized as *ingrata prorsus albedine*, to determine the peculiarities of their pale and anomalous whiteness. Maybe it reflected a growing tendency, as we shall see, to differentiate *that* white strangely appearing among Blacks and with the features of Blacks, from the (so to speak) genuine white of Europeans.

6. Albinos everywhere: Congo and the Darien

A third element contributing to the process of this discovery came from Congo. An important Congolese mission had started in 1645, when a group of missionaries, seven Spanish and five Italian Capuchin friars, were sent to the court of king Garcia II of the Congo. José Pellicer, *cronista mayor de su Magestad*, dedicated to his king a history of the mission. In it the readers, on the theme of human complexion, learned of unheard-of combinations of nature and artifice, and of even more erratic individuals, precious and monstrous at a time, but rooted for their strange complexion in a nature of their own.

According to Pellicer's sources, the natives of Congo are black, but are born white, and their eager mothers, who do not want to wait for the natural darkness to form with time, employ an artifice, *i.e.* they rub small children with an ointment, and put them in the sun:

"Los naturales del Congo todos son de Color Negro [...] Todos nacen Blancos; i despues creciendo poco a poco se van tiñendo en Negros. Si bien las Madres impacientes, no quiriendo esperar a que el tiempo les forme la Negrura Natural, usan del Artificio; i untan a los Hijos niños con cierto unguento, i luego assi untados los ponen a los Rayos del Sol" (Pellicer de Ossau i Tovar 1649, 57).

Nature, once again, and artifice: this convenient cooperation would but fail, however, in one case. The black color, Pellicer tells, properly comes from nature, as it is an intrinsic quality: "El ser Negros propriamente procede de Naturaleza, i Calidad intrinseca; i se reconoce mas, con ver que los Hijos que nacen de Negros en España, tienen la Negrura misma que sus Progenitores" (Pellicer de Ossau i Tovar 1649, 58). Nevertheless, some lastingly white children are born from black parents, are similar to them, but can never become black in spite of all artifice and ointment. These are deemed 'monsters'; they have African features, but are white and feeble-sighted, and exceedingly rare:

"Ay allá Algunos, de lo que nacen [...] Blancos; que siendo sus Padres Negros; aunque los unten, i usen de todo su Artificio, jamas los pueden convertir en Negros; i estos tales son tenidos entre ellos por Monstros. Tienen las proprias Facciones que los Negros, i el Cabello Crespo [...]; pero si Color es blanco, y muy Cortos de Vista. En lo demas de la Persona, i talle, son bien dispuestos como los otros. Pero son poquissimos estos Blancos" (Pellicer de Ossau i Tovar 1649, 58).

A few years later, another friar would provide the European readers with a local name for these wondrous beings. An Italian Capuchin friar of the following generation, G.A. Cavazzi, who had been sent missionary to Congo in 1654, was charged by Propaganda Fide to write an account of the missions, that was edited and published by the Superior of his order in 1687. It

²³ It is made definitely clear in Ludolf 1691, 197.

was soon translated into German (1694) and eventually into French (1732). In this edition, under the marginal title "Negres blancs", we read:

"On appelle *Ndumbdu*²⁴ ceux qui étant nez d'un pere noir, ne laissent pas d'être fort blancs, avec les cheveux blonds et crépez. Ils ont la vue si foible, qu'ils ne peuvent supporter la lumiere du jour; au lieu que dans l'obscurité de la nuit, ils distinguent sans peine tous les objets. Quelques voyageurs ont vû des Indiens de cette espece à l'Istme de Dariau [sic]". (Cavazzi and Labat 1742, 1:297)

They had an important role in the court life and in society, although they seemed, in that narrative, be more of the victims of it:

"Ces *Ndumbdu* tiennent le second rang parmi les *Nquiti*. Ils y sont en si grande veneration, que personne ne passe devant eux, sans leur faire de profondes réverences. Les Ministres se servent des cheveux de ces miserables pour leurs sortileges [et] ils les achetent à grand prix". (Cavazzi and Labat 1742, 1:297)

The reference to the Isthmus of Panama, also known at the time as the Isthmus of Darien, is not present in the Italian original. ²⁵ Labat, the French translator and editor, must refer to them second-hand since, in his own travel memories, he does not mention them. This brings us to yet another source, and yet another surprising population.

"There is a Complexion so singular among a sort of People in this Country, that I never saw nor heard of any like them in any part of the World". Thus wrote Lionel Wafer, a surgeon and buccaneer who had joined William Dampier's expedition to Panama, when, back to London, he related his experiences in a best-selling *Description of the Isthmus of America*:

"The Account will seem strange; but any Privateers who have gone over the Isthmus must have seen them, and can attest the main of what I am going to relate, though few have had the opportunity of so particular an Information about these people as I have had". (Wafer 1702, 106-7)

These people "are White, and there are of them of both Sexes"; yet "there are but few of them [...] possibly but one to two or three hundred" in comparison to the colored population. They differed from the other Indians chiefly in respect of color, and Wafer was capable to recognise a distinctive character of their whiteness, that made it different, in his eyes, from that of the inhabitants of Europe, and to describe it with a remarkable effort of precision:

"Their Skins are not of such a White as those of fair people among Europeans, with some tincture of a Blush or Sanguine Complexion; neither yet is their Complexion like that of our paler People, but 'tis rather a Milk-white, lighter than the Colour of any Europeans, and much like that of a white Horse" (Wafer 1702, 107).

But Wafer, showing a conspicuous power of observation, also reported a yet unobserved peculiarity of their body hair:

"For there is this further remarkable in them, that their Bodies are beset all over, more or less,

²⁴Ndundu (plural bandundu) means albino in various languages spoken in the Congo basin (lingala, kikongo, etc.). See also Laman (1957, 8; 15).

²⁵ Ndumbù chiamansi coloro che nati di Padri Neri, sono di colore assai bianco con la chioma bionda, e crespa, e deboli di vista, e inhabili a rimirare la luce del Sole, onde avviene che più agevolmente distinguano gli oggetti nel semibuio della notte. Trà Nequiti sopra detti hanno il secondo luogo, e tutti gli altri davanti a costoro riverenti s'incurvano. I Capelli di questi impurissimi Ministri servono alla superstizione di essi Idolatri, i quali, come cosa rarissima, li stimano, e a gran prezzo li comprano" (Cavazzi and Alamandini 1687, 86, §199). On the Nquiti (*nkita*, initiate) see Balandier (1965, 216 f.; 1968, 217 f.). A first ms. version of Cavazzi's work has been recovered in the 20th century (Pistoni 1969), but does not contain this material (see John Thornton, http://www.bu.edu/afam/faculty/john-thornton/cavazzi-missione-evangelica-2/ accessed June 15, 2015).

with a fine short Milk-white Down, which adds to the whiteness of their Skins" (Wafer 1702, 107).

Of Wafer's *Description* a French translation would appear already in 1706, certain passages of which would become part of the standard descriptions of albinos for the use of French writers of the 18th century, so that even first-hand reports—as in certain pages of Voltaire's—will conform to it as a model:

"Leur peau n'est pas d'un si beau blanc que celle des Anglois, c'est plutôt un blanc de lait; et ce qu'il y a de plus remarquable, c'est que leur corps est couvert d'un duvet de la même blancheur; mais ce duvet est si fin, qu'on voit la peau au travers. Les hommes auroient la barbe blanche, s'ils la laissoient croître; mais ils se l'arrachent. Pour le duvet, ils n'essayent point de se l'ôter. Ils ont les sourcils et les cheveux aussi blanc que la peau" (Wafer 1706, 155-56).

7. Peoples or persons?

Just three years after the appearance of Telles' *Historia geral de Ethiopia a Alta*, in 1663, Isaac Vossius, a famous learned man and former royal librarian to Christina of Sweden, in his newly minted handbook for curious and sailors *De motu marium et ventorum* proposed an obiter concerning White Ethiopians in New Guinea, clearly inspired by Argensola, and put again in print the Spanish name for them. Albinos were not only day-blind, according to him, but also deaf:

"Leucoaethiopibus id praecipue contingit, qui noctuarum instar interdiu caeci sunt, noctu vero vident. Tale quoque hominum genus apud Papuas in altera Guinea, quae est ultra Indos orientales, observavere non nostri tantum, verum et Hispani, qui *Albinos* vocant, ac non tantum ad solem caecutire, sed et magna ex parte surdos esse prodidere". (Vossius 1663, 107)

The book was soon translated into French by one Le Chastelain de Crécy: "les Espagnols les ont aussi veuës et les appellent Albinos" (Vossius 1665, 120). Three years later, again, Vossius published another geographical work, 26 an erudite book on the Nile: *De Nili et aliorum fluminum origine*. In it the readers would find a more systematic treatment of White Ethiopians, and the idea that the mistery of their origins could be solved by their unhealthy constitution was openly presented to the public. They inhabited Central Africa; they were attached to the king of Loango, in southwestern Congo, as his *garde d'honneur*:

"Albos vero AEthiopes, sive Leucoaethiopes, uti a veteribus vocantur, non tantum in praedictis regnis ultra Nili fontes austrum versus sitis, sed ac passim in mediterraneis Africae reperiri tam est certum, quam quod certissimum. Magna pars satellitii Regis Louangi constat ex hujusmodi hominibus" (Vossius 1666, 67).

They were, as per the customary description, of so candid complexion, with fair hair and blue eyes, that everyone would take them for Flemish or Germans: "Tanto candore sunt conspicui, ut siquis eos eminus videat, aut Belgas aut Germanos existimet, utpote qui praeter caesios oculos, etiam rufos aut flavos habeant capillos" (Vossius 1666, 67-68). But, said Vossius, their color is not vivid, being instead rather similar to the decolorations of leprosy:

"At vero si quis coram contempletur, longe aliter sentiet. Iste quippe cutis candor, non est vividus, sed cadaverosus omnino et prorsus simillimus lepra laborantibus" (Vossius 1666, 68).

Their eyes are weak, but they see very well in the moonlight; so their enemies attack them only by day, and they fight back at night. Negroes consider these white Moors as monsters, and they do not allow them to multiply: for this reason, Vossius reasoned, they only come

²⁶On this side of his activity see Davids 2012.

from black parents. The Portuguese call them Albinos and, as they are robust, would make them work in the Brazilian mines; but they prefer to die rather than live in slavery:

"Istos Leucoaethiopas Lusitani vocant Albinos et aliquando nonnullos ex his bello captos et in Brasiliam abductos pistrino addicere tentavere, cum praecipuo valeant robore: sed compertum est illos mori malle quam servitutis pati vincula" (Vossius 1666, 69).

Vossius would not allow neither God's will, nor a secret and occult nature, nor the force of imagination, to be the cause of this phenomenon. But since on the Guinea coast there was a whole people of that color, that again the Negroes abhor, he concluded that these White Ethiopians were real lepers, victims of a disease that dries the skin:

"Quamvis vero istud hominum genus e nigris quoque proveniat parentibus, constat tamen in mediterraneis Guineae etiam integram gentem istiusmodi Leucaethiopum reperiri. Horum et habitum et contactum, velut contagiosum, fugiunt alii Aethiopes. Unde, ut puto, colligi potest, vere esse leprosos, vel istam coloris discrepantiam ab aliis Aethiopibus induci a morbo, quod nempe cutis eorum exaruerit" (Vossius 1666, 68).²⁷

Vossius' thesis was pretty striking. It was also influential, since the public raved on the origins of the Nile river and the book circulated widely. It was immediately translated into French, although complementing it with more sceptical contributions (Vossius and Paez 1667). Moreover, the thesis was repeated and propagated by the famous Dutch humanist and armchair geographer Olfert Dapper, in his lavishly illustrated and greatly successful *Description of Africa* (Dapper 1668), eventually translated into French in 1686, and brought to the English public by Ogilby (1670). The 1686 version would be repeated by every French 18th-century *savant* who participated in the debates on albinos that we shall touch upon in the following. Precisely under the marginal title *Albinos*, it read so:

"Ils ont les cheveux blonds, les yeux bleus, le visage et le corps si blanc, qu'on les prendroit de loin pour des Anglois ou des Hollandois, mais à mesure qu'on s'approche d'eux, on s'aperçoit de la différence. Ce n'est point une blancheur vive et naturelle que celle de leur teint, c'est une couleur pale et livide comme celle d'un lépreux ou d'un corps mort. Leurs yeux sont languissans et foibles: mais ce qu'il y a d'admirable, ils ont la vue forte et les yeux brillans à la clarté de la Lune". (Dapper 1686, 332).

"Les savans", it was added, "se donnent la gêne pour en deviner la cause". And here Dapper introduced Vossius' thesis, whose text he was already closely paraphrasing:

"M. Vossius prétend que, dans de certaines Provinces de la Guinée éloignées de la côte, il y ait des peuples entiers de cette couleur, que les vrais Nègres fuyent et ont en horreur comme des pestiferez, et ce savant Critique conclut de là que ces Mores-blancs sont de vrais Lépreux, et que leur blancheur est l'effet d'une maladie qui dessèche excessivement la peau. Il est sur que tous les Nègres seroient sujets à cette contagion, s'ils ne la prevenoient par une friction fréquente". (Dapper 1686, 332)²⁸

²⁷ All Negroes would be vulnerable to this disease, if they did not prevent by quotidian friction with oil or grease, both to keep the skin moist and healthy, and to increase the darkness of their complexion, as a sign of beauty: "Creber autem hic affectus apud Aethiopas, illos praesertim qui in aridis vel aestuosis habitant locis, qui nisi perpetua et quotidiana unctione cutem reficerent, omnes forsan eodem malo laborarent. Hinc nullus apud Nigritas dies transit sine unctione, nec tantum oleo, sed etiam adipe et quavis alia pinguedine totos se imbuunt, done speculi instar niteant: vel hac ratione non tantum cutem arescentem restituunt, sed et sanitatem et nigritiem, quae est pulchritudo Aethiopum, corpori suo conciliant" (Vossius 1666, 68).

²⁸ He expectably reproduced also the subsequent passages: "Les Portugais appellent ces Mores-blancs Albinos [...] Le Roi de Lovango se sert du ministère des Albinos dans les honneurs qu'il rend aux Moquisies, [...] qui signifie démons champêtres" (Dapper 1686, 332).

The first to authoritatively rebuke this theory, that explained *albinos* away by reducing them to the outcome of some endemic disease and thus to a sort of 'non-nature', was the same Hiob Ludolf who, as we have already seen, was transmitting Telles' Ethiopian chronicles to the Latin-reading public. In the page of his *Historia Aethiopica* where he reproduced Telles on the colors of Ethiopians, Ludolf progressed to mentioning those who had discussed other cases of albinism among Ethiopians: "Caeterum albos quosdam homines alibi inter Aethiopes", in the general sense of 'Black Africans'; and here he briefly commented Vossius' hypothesis that the phenomenon remounted to some contagious disease. It simply seemed to him that a nation could not endure if it was kept in existence by a disease, and that a king would have spared himself such an entourage: "Sed (quod pace illius Viri dixerim) non duraturam puto nationem tali morbo infectam: nec in satellitium suum adscisceret Rex Lovangi vere leprosos" (Ludolf 1681, lib. I, cap. 14, §37 fn. *i*).

In a later *Commentarium ad suam Historiam Aethiopicam* (1691) he would have stated his objections in a much clearer and thorough way. He quoted there both Vossius and Dapper and proposed two radical doubts. The first one was whether it could possibly happen that a whole population of White Ethiopians be steadily born of Black parents:

"In duobus tantum haereo, quomodo dici possit: *Id hominum genus e nigris provenire parentibus, et tamen integram gentem istiusmodi Leucaethiopum* reperiri? Si enim parentes nigri sunt, utique illi gentem constituunt, hi autem tanquam degeneres non pro populo sunt habendi, maxime si sint contagiosi". (Ludolf 1691, 197)

The second doubt concerned Vossius' hypothesis: if they are true lepers, Ludolf asked, how come that a king collects them to sit around him in his court? And how come that they are strong and fit to labor?

Deinde, si halitum et contactum eorum alii Aethiopes fugiunt, et si sint vere leprosi, ut Vossius colligit, quomodo admittuntur in aulam Regis Lovangi, et magnam partem satellitii Regii constituunt? Ante thronum Regis sedent averso capite, pellibus tecti, contra morem reliquorum, ut Dapperus loquitur. Et quomodo praecipuo valent robore, si morbosi sunt?". (Ludolf 1691, 197)

Ludolf had rightly pointed out the bone of contention for historically-minded, erudite scholars of such matters. Did only deviating individuals or did an exotic people originate those reports, or maybe both? And were or not these individuals, in whom the Black nature degenerated, the same as the people of White Ethiopians? Ludolf supported the existence of the latter with autoptical witnesses, that, said to say, he could but vaguely mention; and he had to admit the existence of the former:

"Si quid conjicere possum, aliquos dari puto hic illic per Aethiopiam degeneres, e nigris parentibus prognatos, talibus vitiis, quae Vossius narrat, laborantes: gentem tamen *Leucaethiopum* certam esse, ac per se subsistere, vitiis illis carentem. Quae nobis aliquando alii ἀυτόπται declarabunt". (Ludolf 1691, 197)

This is, perhaps, a topical moment, in that it seems to emphasize the progressive and inevitable shift from the evocation of mythical populations in obscure lands, to the acknowledgment of an intrinsic variety of human nature, to the realization of the variability intrinsic to nature in general, and to human nature inside it, in the overall historicization of the natural world that, also in the years 1680s, had begun in the field of geology and would spread to biology in a matter of decades. But the cognizance that perturbed Ludolf did not come totally unprecedented.

A growing awareness of the individuality of the albino condition had been present, although minoritarian and submerged, since the first part of the 17th century. Alonso de Sandoval, a

missionary in the Jesuit college at Cartagena, ²⁹ wrote in 1627 a treatise *De instauranda Aethiopum salute*. At §4 of part I, he reproduced Gomóra's chapter on the color of the Indios. But then he proceeded to enumerate various cases of deviation from the color norm, with particular attention to white children born of black parents. In East Ethiopia, some pitch-black Ethiopians were observed to give birth to white children, who looked like Flemish. In the kingdom of Quiteve, the king kept in his palace, as a very strange and wondrous thing, a girl white as an ermine, and so on:

"sabemos que en la tierra de Zofala, reinos de Mocaranga, de la Etiopía Oriental, se vieron algunas etíopes cafres parir hijos muy blancos, que no parecían sino flamencos, siendo sus padres negros como la pez. Así afirma haberlo visto el maestro fray Juan de los Santos en el reino de Quiteve; y en particular refiere que vio una niña de éstas, blanca como un armiño, la cual tenía y sustentaba el rey en su palacio por cosa muy extraña y prodigiosa. Y que el emperador de Manomotapa tenía otros dos cafres blancos con la misma admiración". (Sandoval 1956, 22)

The same happened in Benin, and from the white offspring, sometimes, black children were born again. The white children, short-sighted and feeble, were deemed very precious:

"Y del reino de Beni tengo cierta y fidedigna información que muchas negras de esta casta y generación cuyos maridos son también negros, paren los hijos tan blancos, que de puro albos salen cortos de vista y con los cabellos plateados, y los hijos de estos blancos suelen con variedad volver a nacer negros, pero todos, unos y otros, afeminados y para poco, y que sólo sirven de hechiceros. A éstos llaman los naturales de la tierra, abaraes, y estímanlos en tanto, que no venderán ninguno aunque sea excesivo el precio que por él les dieren". (Sandoval 1956, 22)

He had seen with his eyes in Cartagena a seven-year-old boy of 'Angolan' origins, whose parents were swarthy black, while he was white beyond comparison, with frizzy blond hair, and very short-sighted. He was known to the whole city, and brought from one place to another:

"Lo que por mis ojos vi en esta ciudad de Cartagena de las Indias y fue un niño llamado Francisco, de edad de siete años, de nación angola, natural del pueblo de Quilombo, cuyos padres eran negros atezados, pero él blanco sin comparación, que en blancura le sobrepujara, rubio y de extremadas facciones españoladas, que era asombro y pasmo a toda la ciudad, que como a cosa maravillosa se le traían de unas partes a otras por toda ella; los ojos tenía pardos y muy cortos de vista: sólo demostraba ser de nación negro en la nariz que la tenía roma y los cabellos, aunque dorados muy retorcijados". (Sandoval 1956, 23)

Still one century later, José Gumilla, writing on the history of Orenoco in 1741, reported on the frequent albino births in Cartagena, and of a Black woman who had produced four albino children out of eight parturitions:

"En Cartagena de Indias [...] una Negra casada con un Negro hasta el año de 1738, llevaba yá de siete á ocho partos, pariendo interpoladamente, ya negros, ya blancos y de una blancura algo fastidiosa, por ser excessiva, de pelo asortijado, y tan amarillo como el mismo azafrán". (Gumilla 1745, 97)

Such births were considered not uncommon among the Black population of Angolan origins, who had been keen to inform the missionary that in their homeland it was just the same:

"de tiempo antiguo consta de semejantes partos, y actualmente, fuera de estos quatro hermanos hai en aquel País otros Negros *Albinos*, que este es el nombre, qué les han impuesto. Fuera de esto, Negros de Angola, que yo examine sobre ello en Cartagena, me asseguraron,

²⁹ On Sandoval see Buitrago Escobar 2007.

que alia en su Patria nacen también algunos, de dichosa Muer, sin que cause novedad á los Negros". (Gumilla 1745, 98)

Nobody like Sandoval, at the time, testifies observations on the alternating expression of such hereditary characters; but for him the only accountable cause is "la fuerza grande de la imaginacíon" (Sandoval 1956, 33). This kind of blindness will extend well into the 18th century, as the idea of a people of white African, instead of white individuals among African non-white groups, also will. We might nonetheless say that now the framework of a new theory was needed, lest new and perturbing things be again and again reconducted to old and rather useless, yet reassuring, orderly ways of thinking.

8. Meet a prodigy in Paris

Nothing was further from his mind than writing a book, Maupertuis says, when he started his (anonymous) *Physical Dissertation on the White Negro*. He had found himself the night before in a house where someone had brought a young albino who was at that time shown around in Paris, and everyone reasoned endlessly about that *prodigy*:

"Je m'étois trouvé la veille dans une maison où l'on avoit apporté le Negre blanc qui est actuellement à Paris. On nous assura que cet Enfant étoit né de parens très-noirs; et chacun raisonna à perte de vue sur ce prodige". (Maupertuis 1744, Préface, n.p.)³⁰

By the end of the 17th century, the 'scientific' discussion of the structure of the dermal strata had much more progressed than that of heredity. On the matter of skin color, together with geography and history, and alongside the travel reports on which we have dwelt, experimental and theoretic biology and medicine take the stage. Malpighi finds, no surprise, the 'Malpighian layer', called at the time 'reticular membrane', in which the black color is shown by Johannes Pechlin in 1677 to be contained.³¹

But this drew an exceptional attention on the problems that geography and travels had brought up. The researches on the causes of skin color concentrated on Africans, even when the author declared a different intention: "The controversial book by Cornélius de Pauw, *Recherches philosophiques sur le Américains* [Pauw 1768-69], contains a chapter entitled 'De la peau des Américains', but this in fact describes the skin of Africans, not Amerindians!" (Mazzolini 2014, 138). In 1739 the Academy of Bordeaux announced a prize on the theme: "Quelle est la cause phisique de la couleur des Négres, de la qualité de leurs cheveux, et de la dégénération de l'un et de l'autre?".³²

Maupertuis set himself the task to explain, by the aid of a materialistic theory of generation and heredity, why light-skinned children are occasionally born to dark-skinned parents. It was not necessarily the most obvious of reactions. Voltaire, *e.g.*, who also attended one of those occasions, took the chance instead to revive an anti-religious warhorse of his—the debate on poligenetic versus monogenetic origins of humankind—concomitantly resurrecting the

³⁰ The English paraphrase follows Terrall 2002, 209. "Maupertuis used the albino boy as a hook to attract the attention of those witnesses who had seen him and argued about his origins [...]. The book circulated through the milieu where the albino had been viewed, provoking speculation about the identity of its author. It sold out in short order" (Terrall 2002, 208). See also Curran 2009.

³¹ This development is reconstructed in Mazzolini 2014, who also sums up the main results obtained by anatomists and physiologists, among which there are, as far as our theme is mostly concerned: to consider blackness a natural phenomenon and locate it in the Malpighian layer of the skin; to show that the dermis is white in both Europeans and Africans, with a differently colored Malpighian layer; to demonstrate that the black pigment is also present in part of the eye and in cuttlefish ink; to demonstrate that albinism is a pigmentary disorder common to all humans (Mazzolini 2014, 139-40).

³² See Curran 2011, chapter 2 "Sameness and Science".

ethnographic myth of White African populations in order to give them the status of a separate human species:³³

"Voici enfin une nouvelle richesse de la nature, une espèce qui ne ressemble pas tant à la nôtre que les barbets aux lévriers. Il y a encore probablement quelque autre espèce vers les terres australes. Voilà le genre humain plus savorisé qu'on n'a cru d'abord; il eût été bien triste qu'il y eût tant d'espèces de singes, et une seule d'hommes". (Voltaire 1744, 523-24)

He indeed used expressions that we cannot but find quite inconvenient: "J'ai vu il n'y a pas long-temps à Paris un petit animal blanc comme du lait" (Voltaire 1744, 521). He added: "Cet animal s'appelle un homme, parce qu'il a le don de la parole, de la mémoire, un peu de ce qu'on appelle raison, et une espèce de visage" (Voltaire 1744, 522). Maybe he was expressing a haughty restraint towards a kind of curiosity that had become clichéd. But he lightheartedly repeated all the commonplaces of the recent albino literature:

"La race de ces hommes habite au milieu de l'Afrique: les Espagnols les appellent *Albinos*; leur principale habitation est près du royaume de Loango. Je ne sais pourquoi Vossius prétend que ce sont des lépreux; celui que j'ai vu à l'hôtel de Bretagne avait une peau très-unie, trèsbelle, sans boutons, sans taches. Cette espèce est méprisée des nègres [...]". (Voltaire 1744, 522).

In the *Essais sur les moeurs*, some years later, he would call them again a 'race', and a nation, that he depicted as the like of the Troglodytes. He refused any comparison between 'their' and 'our' whiteness:

"Les Albinos sont, à la vérité, une nation très petite et très rare; ils habitent au milieu de l'Afrique: leur faiblesse ne leur permet guère de s'écarter des cavernes où ils demeurent; cependant les Nègres en attrapent quelquefois, et nous les achetons d'eux curiosité. [...] Un Albinos ne ressemble pas plus à un Nègre de Guinée qu'à un Anglais ou à un Espagnol. Leur blancheur n'est pas la nôtre". (Voltaire 1756, 8)

We are touching here, maybe, one of those dividing lines between different kinds of Enlightenment. So many reactions, although less peculiar, were based on the refuse of any theory of heredity and of the variability of human nature, be it a common nature or not. Charles de La Motte, in an *Essai sur la cause de la couleur des Nègres en général, et en particulier de celle des Nègres blancs, ou mouchettés*, wrote: "Je fais remonter, comme ont fait des autres Auteurs, la cause de la couleur des Nègres à l'effet de l'impression de l'air, et de la nature du climat" (La Motte 1752, 234). He treated Maupertuis' *parties séminales* as they were organic molecules of the kind that was employed by Buffon: "si la couleur des Nègres vient de ce que de génération en génération les parties séminales, primitivement noires et analogues, se sont réunies pour former un embryos nègre, on devroit voir des Nègres ailleurs que sous la Zone torride" (La Motte 1752, 233-34). ³⁴ La Motte preferred to attribute to sheer fortuity a transient deviation from an otherwise stable nature:

"Je penserois donc que cette diversité de couleurs devroit être attribuée une défaillance de la membrane réticulaire, ou à une altération de cette partie du corps des Nègres, duë au pur hazard, à quelque accident, ou à quelque vice interne. Je croirois encore que ce vice n'est point héréditaire, qu'on ne le transmet point à ses enfans, qu'on ne l'a point reçu de ses Pères". (La Motte 1752, 251-52)

It is better, according to him, not to look for causes: one might surmise that an "humeur grasse et onctueuse" be the cause of albinism; but what did then produce this humor? Useless question; better desist, he recommended: "Quand le Physicien veut remonter à l'explication

³³ See Gliozzi 2000.

³⁴ May I quote Pasini 2012. See also Wolfe 2010.

des causes prémières, ne se trouve-t-il pas souvent arrêté [...] quand il veut tout expliquer, il se trouve souvent obligé de dire des absurdités, ou de se taire" (La Motte 1752, 252). It is amazing to see this third-class scepticism invoked to protect nature from its own variety, and the naturalist from reflecting on it.

Such utterances of La Motte's were repeated approbatively by the Swiss librarian, fiscal official and polygraph Samuel Engel in his *Essai sur cette question: quand et comment l'Amérique a-t-elle été peuplée d'hommes et d'animaux?* Engel, moreover, added to his retelling a touch of 'slippery slide' argument:

"Il se peut fort bien que certaine maladie fasse changer cette réticule en tout ou en partie et en fasse un Nègre blanc ou moucheté, mais le mal est que bien des Philosophes, ou soi-disant tels, trouvant que tel effet provient de telle cause dans tel sujet, ou telle occasion, concluent que cette cause est générale; et comme ici la blancheur en général des habitans de la zone torride ne peut provenir que de la même cause, il seroit à craindre que bientôt ils ne fissent passer pour lépreux tous les peuples blancs". (Engel 1767, 90)

Accidentality, these authors clearly show, was considered as a preservative of the stability of nature, and not as the omen of some universal vortex of mutability, nor of the spontaneity of vital matter. There was a sort of disoriented common sense, that, while the bourgeois were reversing the conditions of the human world, still preferred to invoke the accidentality of an otherwise steady constitution against any hint of an ordinary variability that would let the stability of nature sway.

Also Buffon seemed to have a *penchant* for the accidentality of reasons. But he chose rather to consider albinos (African or American) as individuals who had degenerated from their race because of some accidental cause, according to the overall theoretical contrivance that had allowed him to derive existing species from originary types:

"Ce que j'en ai vû, indépendamment de ce qu'en disent les voyageurs, ne me laisse aucun doute sur leur origine; ces Nègres blancs sont des Nègres dégénérez de leur race, ce ne sont pas une espèce d'hommes particulière et constante, ce sont des individus singuliers qui ne font qu'une variété accidentelle". (Buffon 1749, 501)

He maintained erroneously that those variations would only proceed from black to white: "cette variation de la Nature ne se trouve que du noir au blanc, et non pas du blanc au noir" (Buffon 1749, 502); according to him—and to so many of his fellows naturalists of the time—Nature is originarily white, of the same perfect white of the origins; instead, the accidental restitution of white in an individual otherwise destined to blackness produces a 'very different' sort of white:

"les deux extrêmes se rapprochent presque toûjours, la Nature aussi parfaite qu'elle peut l'être, a fait les hommes blancs, et la Nature altérée autant qu'il est possible, les rend encore blancs; mais le blanc naturel ou blanc de l'espèce est fort différent du blanc individuel ou accidentel". (Buffon 1749, 503)

We easily see that this is a time of confusion, characterised in its understanding of albinos by a surprising comeback of the 'imperfect whiteness', of monsters theories, of the power of imagination, in sum of a vast apparatus of caliginosities that had been put to use in understanding, or misunderstanding, the nature of the variability of human complexions. So it was not accidental, at least, that Maupertuis spoke of a 'prodigy' in reporting the reaction of the Parisian public to the view of an albino child in the flesh. We also easily see, at this point, that this 18th-century debate accompanies, and contributes to, the possibility of deep changes in the way 'nature' is conceived.

9. Vivement Maupertuis

Maupertuis dedicated to these matters the above-mentioned *Dissertation physique* of 1744 and the *Vénus physique* of the following year. In both cases, albinism was not, in reality, the central theme of the work; instead, it was studied in the framework of a theory of generation that Maupertuis wanted to put forward.³⁵ The explanation of albinism would prove the explanatory power of his theory and thus corroborate the theory itself. Maupertuis' conjectures were loosely based on the force of attraction: "Pourquoi, si cette force existe dans la Nature, n'auroit-elle pas lieu dans la formation du corps des Animaux?" (Maupertuis 1752, 247). Attraction, since the *Queries* of Newton's *Opticks* had rehabilitated hypotheses, was a very fashionable explanation in chemistry and, in general, in any combination of elements or particles: it would not be impossible to bend it to a theory of generation.

Maupertuis revived to this purpose the ancient idea that the seed is produced by the whole body,³⁶ and that every part produces small germs similar to itself. This parts are innumerable, and affinity between them regulates their attraction and the resulting combinations:

"Les parties Analogues à celles du père et de la mère, étant les plus nombreuses, et celles qui ont le plus d'affinité, seront celles qui s'uniront le plus ordinairement: et elles formeront des animaux semblables à ceux dont ils seront sortis". (Maupertuis 1752, 262)

Some years later Maupertuis, in the *Essai de cosmologie*, will also make use of casual combinations as originary means to the production of living beings, in a way that very much resembles certain pages of Buffon's on the recombination of *molecules vivantes*:

"ne pourroit-on pas dire, que dans la combinaison fortuite des productions de la Nature, comme il n'y avoit que celles où se trouvoient certains rapports de convenance, qui pussent subsister, il n'est pas merveilleux que cette convenance se trouve dans toutes les espèces qui actuellement existent?". (Maupertuis 1752, 7)

Such expressions of Maupertuis' are sometimes interpreted as they were an anticipation of natural selection, Darwinian fitness and the like.³⁷ But this *convenance* is nothing more than the suitability of the internal organization of casually produced aggregations of matter in relation to the capability to immediately survive, as becomes clear in the lines immediately following:

"Le hazard, diroit-on, avoit produit une multitude innombrable d'individus; un petit nombre se trouvoit construit de manière que les parties de l'Animal pouvoient satisfaire à ses besoins; dans un autre infiniment plus grand, il n'y avoit ni convenance, ni ordre: tous ces derniers ont péri: des Animaux sans bouche ne pouvoient pas vivre, d'autres qui manquoient d'organes pour la génération ne pouvoient pas se perpétuer: les seuls qui soient restés sont ceux où se trouvoient l'ordre: la convenance: et ces espèces, que nous voyons aujourd'hui, ne sont que la plus petite partie de ce qu'un destin aveugle avoit produit". (Maupertuis 1752, 7)

In this passage, his approach is rigorously Epicurean, and of a sort that was quite common among 18th-century materialists.³⁸ What instead is peculiar, is Maupertuis' attention to the

³⁵ "His remarks were [...] embedded in a broad ideological dispute about the existence of vital forces and the authority of the natural sciences" (Müller-Wille and Rheinberger 2012, 73). Alternatively, a very positive appreciation in Davidson (2007, chapter 3).

³⁶ A doctrine that had been supported by Hippocrates (*De generatione* 1; VII, 470L), and refused by Aristotle (*De gen. an.* I, 18; 723b33); but it is endorsed in the *Problemata Aristotelis* IV, 15, 21e32.

³⁷ For a recent instance see Focher 2014.

³⁸ Compare Lamettrie's *Système d'Epicure*, §13: "Les premieres générations ont dû être fort imparfaites. Ici l'oesophage aura manqué; là l'estomac, la vulve, les intestins, etc. Il est évident que les seuls animaux qui auront pu vivre, se conserver, et perpétuer leur espece, auront été ceux qui se seront trouvés munis de toutes les pieces nécessaires à la génération, & auxquels en un mot aucune partie essentielle n'aura manqué. Réciproquement

persistence of the casual production, that is not confined to an originary phase, nor to the spontaneous production of new microscopic beings through self-assembly of organic molecules in suitable environments. Rather it affects, under form of variations, the stable natures of nowadays living being, steadily producing discrepancies or varieties, some of which, although not all of them, are indeed hereditary—albeit, as albinism, they might be recessive, this latter being a concept largely brought to light by Maupertuis himself—and represent aspects of animal, or human, variability.

Nature is the origin of those 'varieties', and chance or art set them going: "La nature contient le fond de toutes ces variétés: mais le hazard ou l'art le mettent en oeuvre" (Maupertuis 1752, 257). This is clearly revealed by the practice of breeding, that is for Maupertuis, as it will be for Darwin, a major term of comparison and analogy. At first there are accidental individual deviation, but art and repeated generations turn them into new species; and just the same can happen with accidental variations: "Le hazard, ou la disette des traits de famille feront quelquefois d'autres assemblages: et l'on verra naître de parens noirs un enfant blanc" (Maupertuis 1752, 262-63).

Thus the chasm between anomalous individuals and outlandish populations that we have seen dominate the speculations on 'White Ethiopians' is eliminated in the *Vénus physique*, since 'monsters' (physically aberrant individuals) are merely the ordinary but rare product of particular variations and, if enough well-formed, could indeed become populations, if they reproduced copiously enough:

"On voit encore naître, et même parmi nous, d'autres monstres qui vraisemblablement ne sont que des combinaisons fortuites des parties des semences ou des effets d'affinités trop puissantes ou trop foibles entre ces parties: des hommes d'une grandeur excessive, et d'autres d'une petitesse extrême sont des especes de monstres, mais qui feroient des peuples si l'on s'appliquoit³⁹ à les multiplier" (Maupertuis 1752, 266).

All this allowed Maupertuis to connect albinism on the one side to hereditary mechanisms, and to variability on the other side; and to consider both as parts of one and the same natural phenomenon. Evidently he believed that it was not necessary, to produce individual white Africans, that whole populations of White Africans existed, since some sort of recessive inheritance, as well as innovative variations, could provide a sufficient explanation:

"je ne crois pas que cela fût nécessaire [que le père étoit un Nègre-blanc]: il suffisoit que cet enfant eût quelque Nègre-blanc parmi les ayeux, ou peut-être étoit-il le premier Nègre-blanc de la race". (Maupertuis 1752, 260)

Maupertuis was all the same of the opinion that white had been the primitive color, since black newborns among white populations were absent or at least comparatively much rarer than albinos among the Blacks.⁴⁰ His reasoning was in the end quantitative, or probabilistic:

"S'il naît des enfans blancs parmi les peuples noirs; si ces Phénomènes ne sont pas même fort rares parmi les peuples peu nombreux de l'Afrique et de l'Amérique; combien plus souvent ne devroit-il pas naître des Noirs parmi les peuples innombrables de l'Europe, si la nature amenoit aussi facilement l'un et l'autre de ces hasards?" (Maupertuis 1752, 265).

ceux qui auront été privés de quelque partie d'une nécessité absolue, seront morts, ou peu de temps après leur naissance, ou du moins sans se reproduire" (Lamettrie 1796, 8).

³⁹ This is not just said in passing. In fact Maupertuis "did not simply observe hereditary phenomena; he also hoped to manipulate them" (Davidson 2007, 89).

^{40 tr}De ces naissances subites d'enfans blancs au milieu de peuples noirs on pourroit peut-être conclurre que le blanc est la couleur primitive des hommes, et que le noir n'est qu'une variété devenue héréditaire depuis plusieurs siécles, mais qui n'a point entièrement effacé la couleur blanche qui tend toujours à reparoître. Car on ne voit point arriver le Phénomène opposé: l'on ne voit point naître d'ancêtres blancs des enfans noirs' (Maupertuis 1752, 264).

But be that whiteness deemed an illness or an accident, it would be nothing else than a hereditary variation, that reinforces or erases itself over the course of generations: "Car qu'on prenne cette blancheur pour une maladie, ou pour tel accident qu'on voudra, ce ne sera jamais qu'une variété héréditaire qui se confirme ou s'efface par une suite de générations" (Maupertuis 1752, 261). This was not different from the analog variations in beasts, *i.e.*, albinism in humans was recognized the same phenomenon as albinism in blackbirds and crows:

"Ces changemens de couleur sont plus fréquens dans les animaux que dans les hommes. La couleur noire est aussi inhérente aux corbeaux et aux merles, qu'elle l'est aux Nègres: j'ai cependant vu plusieurs fois des merles et des corbeaux blancs". (Maupertuis 1752, 261)

* * *

The progressive discovery of albinism, and the response to it, had shown, as we have seen, major shifts along history. It had nearly always been reduced either to an oddity of creation, or to a deviation to be depotentiated by reducing it to disease or degeneration; it played now an essential, positive role in the first and rudimentary introduction of a theory of heredity. 41

The Early-Modern segment of this discussion, as we also have seen, culminates during a major scientific development, that disconnects nature (and essence) from the stability of species and races, and that will shift the focus from stability to variability. Maupertuis stays midway in this development, as is made clear by the pre-eminence, in his works, of the general theory of reproduction through invisible particles, over the rudiments of heredity: nevertheless, some major traits of this overall change are easily detectable in the passages that we have just read, and show the imminence of a radical alteration.

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⁴¹ "It is [...] not the case that a homogeneous 'culture of heredity' suddenly emerged around 1800. Rather, local, social, and institutional networks were reconfigured step by step, and it was only as a result of these reconfigurations around the middle of the 19th century that a field of connected phenomena presented itself to, and could be analyzed as such by, theories of heredity" (Müller-Wille and Rheinberger 2012, 73-74).

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