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Chapter Eleven

“AM I NOT A MAN AND A BROTHER?”

I am haunted by the human chimpanzees I saw [in Ireland]. . . . To see white chimpanzees is dreadful; if they were black, one would not feel it so much.

—CHARLES KINGSLEY

THE 22-YEAR-OLD naturalist who went aboard HMS *Beagle* just after Christmas 1831 was the son of a privileged family with a long history in the antislavery movement. His grandfather Josiah Wedgwood, a pottery manufacturer, had mass-produced the jasperware cameo that became the symbol of opposition to the slave trade, often worn as a bracelet or hair ornament, the way people might wear a pink ribbon or peace symbol today. It depicted a black man in chains pleading for his freedom on one knee, framed by the slogan, “Am I not a man and a brother?”

But when Charles Darwin experienced his first horrifying encounter with human beings in an uncivilized state 12 months later at the southern tip of South America, brotherhood was the furthest thing from his mind. The people he met in Tierra del Fuego struck his genteel eyes as “stunted in their growth . . . hideous faces bedaubed with white paint, skins filthy and greasy . . . hair entangled . . . voices discordant . . . gestures violent and without dignity.” In times of hunger, he reported credulously, the Fuegians would sooner kill and roast their

old women for food than sacrifice their dogs. (“Doggies catch otter,” they explained, “old women no.”)

The visit to Tierra del Fuego still troubled him years later, at the conclusion of *The Voyage of the Beagle*, where he asked with evident anguish, “Could our progenitors have been men like these?—men, whose very signs and expressions are less intelligible to us than those of the domesticated animals.” The shock of the aboriginal also leapt to mind when he encountered a great ape for the first time at the London Zoo in 1838. “Let man visit Ourang-outang in domestication,” Darwin wrote in his notebook, and he would find this creature expressive, intelligent, and affectionate. By contrast, seeing a human in the “savage” state “roasting his parent, naked, artless, not improvable,” would make it impossible for any man “to boast of his proud preeminence.” The notion of descent from apes was almost preferable to kinship with certain humans.

The people visited by early European explorers no doubt reciprocated the sense of horror, though we have only the explorers’ bemused word for it. In Gambia, for instance, young Africans questioned the eighteenth-century explorer Mungo Park about the whiteness of his skin and the prominence of his nose: “They insisted that both were artificial. The first, they said, was produced when I was an infant, by dipping me in milk; and they insisted that my nose had been pinched every day, till it had acquired its present unsightly and unnatural conformation.” Explorers sometimes invited their readers to laugh at the naïve failure to recognize Europeans as the human archetype. Park reported that when he praised “the lovely depression of their noses,” his Gambian friends told him that “honey-mouth,” or flattery, would get him nowhere. But doubt resonated beneath the joke.

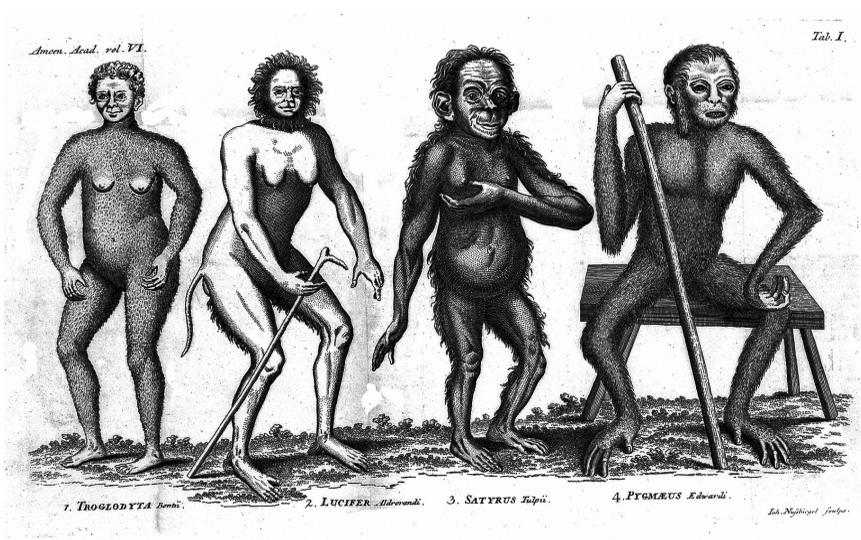
Coming to terms with other races was only one among a host of discomfiting ideas and experiences resulting from the pursuit of new species. Naturalists were also grappling with the sprawl of geologic time; the evidence that a vast herd of species created by God had somehow gone extinct; the queasy suspicion that nature was not a great chain of being, perfect and orderly, but a sprawling hodgepodge; the paradox

that species thought to result from separate acts of creation should nonetheless share so many similarities, as if God had needed to plagiarize His own work; and always the ominously rising tide of evolutionary ideas.

In an angry letter to a colleague sent in 1831, when he was a zoological assistant at the British Museum, John G. Children briefly slipped by writing about “the connexions” between species, but instantly caught himself and corrected it to mere “*similarities* which subsist between created beings.” He went on: “I do protest, and ever will, against the abominable trash, vomited forth by Lamarck and his disciples, who have rashly, and almost blasphemously imputed a period of comparative imbecility to Omnipotence! when they babbled out their juvenile crudities about a progression in nature—that is in God—from abortive imperfect first attempts, to more and more perfect efforts and results!” Children asked to have his remarks kept “sub silentio” and finished with a hapless plea that the entire scientific community might well have echoed: “I beg I may not be entangled in controversy.”

But nothing matched the anxiety inspired by simultaneously encountering other primate species and other human races for the first time. That the two things—apes and human races—so often came together in intellectual debate seems outrageous to the modern mind. We tend to feel clear about where we draw the line between humans and other primate species. It’s also clear that early European thinkers often drew that line in a calculated effort to preserve Europe’s grand delusion about its own special nature—and consign “lesser” races to submission, enslavement, and even extermination. We now know, moreover, that it’s impossible to identify a boundary separating one human race from another; racial categories have no scientific meaning.

Even so, it’s revealing to set aside present knowledge and imagine just how confused early thinkers were by the entire question of species: Why did there suddenly seem to be so many kinds of animals—and of humans? Why did they vary so much from place to place? When were the differences just the normal variation that occurs from one individual to the next, and when did these differences add up to dis-



Though most eighteenth-century naturalists had never seen one, they worried that “scarcely any mark” distinguished apes from humans.

tinguish one species from another? These questions took on particular point where they touched on our own nature not so much as children of God, but as primates—a term coined by Linnaeus that was itself fraught with the subtext of hierarchy: It means “of the first rank.”

Apart perhaps from a few creatures in royal menageries or the figures in medieval bestiaries and travelers’ tales, people in Europe had lived largely apart from apes and monkeys, as well as other human groups, for a period extending roughly from the migration out of Africa 50,000 years ago and the extinction of Neanderthals 30,000 years ago to the start of the age of discovery not quite 700 years ago. It was long enough to develop a considerable sense of separateness from the rest of nature, as well as a splendidly puffed-up notion of their own special place in the world.

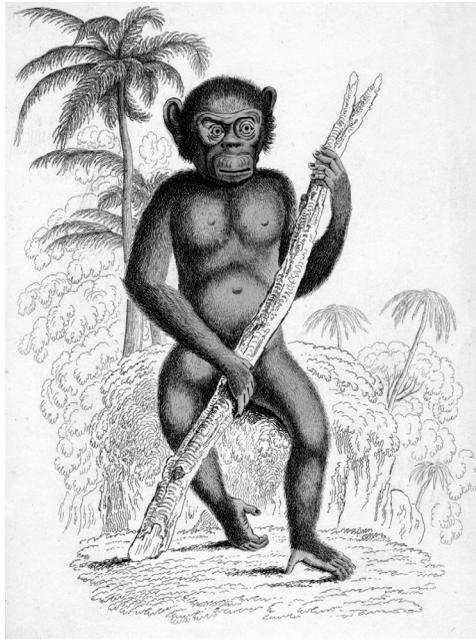
One of the earliest mentions of an ape species in European literature appeared in 1641, and the reference was characteristically confused. The animal in question was a juvenile chimpanzee, shipped to Europe by a slave trader in West Africa. But the word “chimpanzee” itself would remain unknown outside Africa for another century. Prob-

ably because of the extensive Dutch trade in Malaysia and Borneo, Amsterdam anatomist Nicolaes Tulp instead used the more familiar name "orangutan," from the Malay for "person of the forest." The London physician Edward Tyson also said *orangutan* (or *orang-outang*), as well as *pygmy* and *Homo silvestris* (man of the woods) when he dissected a juvenile chimpanzee in 1699. Orangutan remained the catch-all for all great apes until mid-nineteenth century.

Both Tulp and Tyson overstated the similarities between apes and humans, no doubt because, at first viewing, they were so striking compared with anything Europeans had seen up to that point. Tulp's essay included an illustration of an ape with modestly downcast eyes and hands concealing its genitals. Tyson similarly illustrated his treatise with a picture of his "pygmy" walking upright, with the help of a cane. These apes seemed to be almost perfectly human in part because both subjects were juveniles, which have a flat face much like ours. (The chimpanzee jaw only begins to jut forward in adolescence.) Belief in the great chain of being also encouraged naturalists to minimize the gap between humans and apes as a way of filling in the missing links. Like Aristotle, they thought that "nature makes no sudden leaps."

And yet they also wanted to keep apes at a distance. The idea of a finely graded progression, from the lowliest amoeba on up, extended into the human species, helping to reinforce traditional thinking about rank and social hierarchy. Thus Tyson's essay introduced a rhetorical device that would become standard in the literature about primates. In a "dedicatory epistle" to his aristocratic patron, he emphasized the similarities not so much between men and animals at large, as "between the lowest Rank of Men, and the highest kind of animals." In just this fashion, later thinkers would repeatedly deflect the full impact of our similarity to apes onto people of the wrong social class, nationality, or skin color.

Firsthand knowledge for making careful distinctions about apes was often woefully lacking. "In many cases, naturalists never set eyes on the animals they described," Londa Schiebinger writes, in *Nature's Body*, "but drew their ideas about these creatures from the rather fanciful



Nineteenth-century illustrators were still making chimpanzees look like humans gone slightly askew.

teachings of the ancients combined with the untrained observations of voyagers.” The Roman naturalist Pliny had described subhuman cave-dwellers in the Atlas Mountains, and Plato’s *Republic* had included an allegory of African cave-dwellers. Linnaeus made this the basis for a proposed second human species, *Homo troglodytes*, taking the species name from the Greek words meaning literally “one who creeps into holes.” (Chimpanzees are known to this day as *Pan troglodytes*, though they live in trees, not caves.) Satyrs, pygmies, the occasional wild child (supposedly raised by wolves), and unusually hairy humans all attracted serious consideration.

Linnaeus put apes in the same taxonomic order with humans, to the consternation of many critics. “I know full well what great differences exist between man and beast when viewed from a moral point of view: man is the only creature with a rational and immortal soul,” he wrote. “If viewed, however, from the point of view of natural history and considering only the body, I can discover scarcely any mark by which man

can be distinguished from the apes.” He based this broad assertion on having seen only a single juvenile chimpanzee specimen, in 1760, but he continued, “Neither in the face nor in the feet, nor in the upright gait, nor in any other aspect of his external structure does man differ from the apes.”

Apes even seemed to view the world as we do. In the tenth edition of his *Systema Naturae*, Linnaeus projected his own obsession with hierarchy onto the orangutan, also sight-unseen: “By day hides; by night it sees, goes out, forages. Speaks in a hiss. Thinks, believes that the earth was made for it, and that sometime it will be master again.”

“*An Universal Freckle*”

The European debate about where human races fit into this bewildering picture usually started from the Biblical tradition that all humanity had descended from Adam and Eve. In the late eighteenth century, Johann Blumenbach, a German physician often regarded as the father of anthropology, described five separate human varieties—black, white, yellow, red, and brown, the last referring to Southeast Asian and Pacific Islanders, and he argued adamantly that all of them belonged to a single human species. Along with most other naturalists then, he believed that the ancestral human form was white and European, probably originating around the Caucasus Mountains. Hence he coined what historian Winthrop D. Jordan has called “the inept but remarkably adhesive term *Caucasian*.”

Other races had diverged or degenerated from this original type, according to conventional wisdom, because of environmental factors like diet, mode of living, and climate. Darker skin, for instance, resulted from exposure to the tropical sun, much as sunlight caused white people to develop freckles, except that black skin was what one thinker called “an universal freckle.” The environment seemed to draw out latent powers in human nature, making some races better suited to particular circumstances. For instance, the German philosopher Immanuel Kant attributed both skin color and “the strong body odor of the Negroes, not to be avoided by any degree of cleanliness” to their special ability to

survive in the “phlogisticated air” of swamps and thick forests. According to a nonsense theory dating back to the Ancient Greeks, phlogiston was a combustible essence produced by respiration and decomposition and it abounded in moist, tropical habitats. So Kant thought Africans had developed the special ability to “dephlogisticate” the blood through the skin, in their sweat. The theory suggested practical implications for the European colonial enterprise, in that whites, lacking this special ability (or, as we now know, lacking acquired immunity to tropical diseases), often died on visiting the same dank regions.

Proponents of the single species idea believed that people could acquire traits like skin color and pass them on to their offspring. Some thinkers argued that these traits could also *change back* in the right circumstances. In an influential 1787 essay on human varieties, Samuel Stanhope Smith, president of what is now Princeton University, argued that transplantation to temperate America, combined with freedom from slavery, would gradually cause blacks to revert to the original type. He reasoned that foxes, bears, hares, and other animals in cold regions turn snow white. Likewise blacks would become the equal of whites by losing “the peculiar deformities of the African race” and literally becoming white. Smith noted that domestic slaves often seemed to become less African over three or four generations, “a striking example of the influence of the state of society upon the features.” Perhaps because he was a Presbyterian minister, it did not occur to him that some factor might be at work other than the gracious company of civilized white people.

Smith regarded Henry Moss, born a slave in Virginia, as living proof of the potential for racial change. At the age of 38, Moss’s “natural colour began to rub off,” according to an ad published in Philadelphia in 1796. Now “his body has become as white and as fair as any white person, except some small parts, which are changing very fast.” Moss’s ad, for an appearance at the Black Horse tavern on Market Street, promised that the sight would open “a wide field of amusement for the philosophic genius.” Making the trip over from Princeton, Smith was among those paying a quarter for the privilege. The physician Benja-

min Rush also took in the spectacle and concluded that Moss had been "cured" of the disease of blackness. And in a sense this was true. Moss, who suffered from the skin depigmentation called vitiligo, used his freak-show income to purchase his freedom from slavery.

The supposed superiority of whites went almost unquestioned, even when one iconoclastic thinker argued that humanity had originally been black. James Cowles Prichard, a physician and ethnologist in Bristol, England, recognized the power of artificial selection to alter the appearance of animals in domestication. He concluded that achieving civilization was a process of self-domestication, which had resulted in the development of whites as the new, improved model of humanity.

Equality and Facial Angles

Within the limits of his time, the Dutch anatomist Petrus Camper was, like Rev. Smith of Princeton, a forthright proponent of equality among races. By background, he was a physician and a thorough naturalist, who discovered the lightweight, air-filled character of bird bones, identified a rhino from Java as a new species, and discredited the myth of the unicorn. He used his connections in the East Indies trade, which had made him rich, to obtain and dissect orangutan specimens, demonstrating that they were a separate species, not a degenerate human variety.

He also set out to disprove the myth that black Africans "descended from the mingling in olden times of white people with great Apes or Orang-Outangs." On dissecting a black Angolese boy in Amsterdam in 1758, he reported that he found "his blood very much like ours and his brains as white, if not whiter." The dissection included a part-by-part comparison "with the famous description of the Bush-man or 'Orang-Outang' of the renowned Tyson. I must confess that I found nothing that had more in common with this animal than with a white man; on the contrary, everything was the same as for a white man." Camper invited his listeners to join him "in holding out the hand of brotherhood to Negroes and Blacks, and in recognizing them as true descendants of the first man whom we all recognize as our Father."

The horrible irony, given this egalitarian outlook, is that Camper went on to develop what would become the chief visual icon for belittling and enslaving blacks. Science historian Miriam Claude Meijer has recently argued that later polemicists distorted and misused Camper's work. He started, she says, from an honest study of differences in skull shape. Whereas Buffon thought Africans acquired a flattened nose from being carried in a sling pouch after birth, pressed up against their mothers' backs (the flip side of Mungo Park's "pinched" nose), Camper attributed the facial characteristics of different races to the underlying structure of the skull.

In the 1770s, he began to theorize about facial angle, meaning how far a line from the front teeth to the forehead deviated from the vertical. He had noticed how the straight, perpendicular profiles in classical sculpture contrasted with the more sloping, prognathous faces depicted in Dutch and Flemish art. Camper didn't attribute greater intelligence to one shape of skull over another. But out of a sense of aesthetics, like someone arranging the books on a shelf by the color of their bindings, he lined up the skulls in his anatomical collection according to facial angle. The result, he wrote, was "amusing to contemplate." First came monkeys and apes with a facial angle of 40 to 50 degrees. Then came Negroes at 70 degrees. A succession of intermediary races progressed on up to Europeans, who were, at a facial angle of 80 degrees or better, just short of Greek gods and archangels. Camper didn't draw conclusions. But by the simple trick of pairing Africans with apes, his lineup of facial angles would become the visual shorthand for racial inferiority well into the twentieth century.

The notion of innate white superiority predominated even in the most progressive intellectual circles. Thomas Jefferson regarded blacks as irredeemably debased. He lamented the absence of a proper natural history of the race and wrote, "I advance it therefore as a suspicion only, that blacks, whether originally a distinct race, or made distinct by time and circumstances, are inferior to the whites in the endowments of both mind and body." (This was years before the slave Sally Hemings would become his likely mistress and mother of several of his children.)

David Hume, one of the great liberal philosophers of the Enlightenment, did not stop at mere suspicion. "There never was a civilized nation of any other complexion than white," he declared. Other races did not even belong to the same species. "In JAMAICA indeed they talk of one negroe as a man of parts and learning; but 'tis likely he is admired for very slender accomplishments, like a parrot, who speaks a few words plainly."

Charles White, an eighteenth-century obstetrician and fellow of the Royal Society, celebrated the preeminence of whites as if there could be few things more delightful than his own pale image in the mirror: "Ascending the line of gradation, we come at last to the white European," he wrote, the "most removed from the brute creation . . . the most beautiful of the human race. No one will doubt his superiority in intellectual powers . . . Where shall we find, unless in the European, that nobly arched head, containing such a quantity of brain . . . ? Where the perpendicular face, the prominent nose, and round projecting chin? . . . Where, except on the bosom of the European woman, two such plump and snowy white hemispheres, tipt with vermillion?" It reads like a Gilbert & Sullivan parody, sung by a dancing chorus of periwigged gentlemen in knee breeches, and delivered with almost enough conviction for the intended audience to ignore the muffled cries of the slaves chained belowdecks.

At times, however, the consequences of such thinking came all too visibly to the surface. Robert Schomburgk was a German naturalist best known for discovering *Victoria regia*, a waterlily with great round leaves like serving platters. He happened to be at Anegada, the northernmost of the Virgin Islands, in 1831, when a passing Spanish slaver, the *Restauradora*, hit a reef and sank in shallow water. When he passed the spot soon after, "the clear and calm sea" revealed "numerous sharks, rockfish and barracuta . . . diving in the hold where the human carcasses were still partly chained, to tear their share from the bodies of the unfortunate Africans."