Orang-outang or *Homo sylvestris*: ape-men before Darwin

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This paper discusses the presence of belief in ape-men, and ape-women, prior to Darwin. Beliefs regarding various mythological creatures with human-like physical form were present in antiquity, and displayed in drawings of various quality. Lack of knowledge was filled in with speculation from mythology and influenced early science. For instance, poor quality drawings of Egyptian baboons became corrupted and modified in 17th and 18th century images, with their subsequent depiction as loose-living forest-dwelling people, sometimes known as satyrs, orang-outangs, or *Homo sylvestris*. Such speculation was even present in the work of Carl Linnaeus, and graphically illustrated by one of his students. With some controversy, Linnaeus placed apes and monkeys in the genus *Homo* and he tried to identify several missing links as part of an Aristotelian chain of being between apes and human beings. Linnaeus still believed in special creation, but others in the 18th century, such as Lord Monboddo, in contrast to Linnaeus argued for an evolutionary progression from ape to man. However, the evolution of man was rejected by Comte de Buffon and Peter Camper on the basis of direct studies of apes and belief in the divine uniqueness of human beings.

The belief that human beings evolved from apes developed among some European academics in the late 18th century, and not originally with Darwin in the 19th century. But careless thinking about this subject in the 18th century prepared the ground for Darwin’s theory. Historical testimony suggests that popular mythology from antiquity, and its influence upon scientific discourse, had already primed European minds to accept the idea of evolution of man from apes. This paper examines the rise of belief in ape-men (and ape-women) at a time when such popular mythology and speculation filled-in the many gaps left by a lack of knowledge. Poor drawings of the few available specimens were also copied and embellished over several centuries, thus compounding the problem.

Firstly, beliefs relating to strange creatures from antiquity will be outlined, via Pliny’s *Natural History* and Augustine’s *City of God*. Then consideration will be given to developments in the early modern period, followed by the flawed classification scheme set out by Linnaeus, and erroneously portrayed in drawings by his student Hoppius in the 18th century (figure 1). This was, perhaps unwittingly, one of the first ever ape-to-man comparative drawings, but without belief in an evolutionary progression. The scheme was based upon the Aristotelian great-chain-of-being, albeit still in the context of special creation. Lord Monboddo on the other hand argued for an evolutionary progression from ape to man, but this idea was rejected by Comte de Buffon and Peter Camper on the basis of empirical studies, human intelligence, and lack of capability for complex language.

Beliefs from ancient Greece and Asia

Accounts of strange human-like creatures or human beings with severe physical deformities are found in works from antiquity. Pliny, a first century Roman author, relayed accounts from the then-known world in his *Natural History*. The *Sciapodas* or *Monocoli* were considered to possess one leg, but with large feet with which to shade from the sun, while the *Pygmies* were a race of dwarf humans, often engaged in struggle with cranes. The *Satyrs*, from the mountains of western India, were said to sometimes run on two legs, sometimes on four, but were very swift. They were also referred to as forest-people, or wild people (Latin: *gentem silvestrem*), covered in hair with striking eyes and dog-like teeth, unable to speak, but only screech (Latin: *sine voce, stridoris horrendi*). It is likely that Pliny was relaying eyewitness sightings of apes, but the satyrs of ancient Greece were god-like creatures; half-human and half-animal, with the legs and ears of goats or horses.

In the early Christian period Augustine set out a clear demarcation between Adam’s lineage, mythical creatures and non-human animals. His discussion included the pigmies, *hermaphroditae*, *cynocephali*, and *skiopodes*, and known animals of apes (*simias*), monkeys (*cercopithecus*), and *sphinges*. And he was skeptical of some of the incredible reports, wondering whether they were in fact accurate. He commented:

“But whoever is anywhere born a man, that is, a rational, mortal animal, no matter what unusual appearance he presents in color, movement, sound, nor how peculiar he is in some power, part, or quality
of his nature, no Christian can doubt that he springs from that one protoplast [Adam].”

Augustine commented further that if one did not already know that “apes, and monkeys, and sphingas” are not human but animals, then some “historians would possibly describe them as races of men, and flaunt with impunity their false and vainglorious discoveries”. Augustine correctly identified the pigmies as a tribe of humans and their small stature did not take away from their genetic connection to Adam.

In subsequent centuries, belief in the existence of satyrs or Homo sylvestris persisted (Latin: sylvestris—of the forest). The testimony of foreign traders and seamen also relayed fabulous stories from indigenous people living in distant lands, and these accounts subsequently passed into the academic imagination. While in Asia, beliefs about god-like men and women arose, sometimes with ape-like features. They were referred to as Vanara in India (vana: forest, and nara: man), and usually depicted as human, but with the heads of monkeys. They were believed to have some supernatural powers, and so became entwined with the Hindu pantheon. The Chinese believed in a god-like monkey king, Sun Wukong, said to be born from a stone, and possessing great strength and magical powers. Further east, the Indonesians held that there existed ape-human hybrids that lived in the jungle. The name given was orang-outang, meaning man-of-the-woods (orang: person, outang: forest), but in reality, they were probably a reference to the orangutan animal.

Belief in ape-man during the early modern period

Few specimens of apes from Africa and Asia arrived in Europe during the early modern period, allowing confused speculation as to the nature of these animals to grow. Some knowledge of apes and monkeys was known from antiquity in Europe from their connections to India, Egypt, and North Africa. But much of this knowledge was understood through hearsay, influenced by speculation from mythology and sometimes imaginative illustrations.

In the 16th century one of the best illustrated works on zoology was Conrad Gesner’s Historia Animalium, first published in 1551. This book depicted many exotic animals with remarkable accuracy, including monkeys and apes. Mixed in with these was an illustration of a large monkey (Cercopithecus) that was a virtual copy of Breydenbach’s image of 1486, a long-tailed monkey standing with the stature and form of a man with human-like arms and legs, holding a staff and leading a camel (figure 2). Gesner referred to his drawing as a hairy satyr with human-like form. The words underneath Breydenbach’s drawing “Non constat de noĩe [nomine]” implied there was no agreement about the name of the animal. Breydenbach’s image was possibly derived from an ancient Egyptian iconography of the god Thoth, sometimes portrayed as a baboon with a staff. It may also be a rather poor illustration of the hamadryas baboon (Papio hamadryas) (figure 3). Gesner also used the
testimony of ancient Greek scholars such as Megasthenes, who referenced observations of monkeys in India, and like Breydenbach illustrated his drawing with the face of an ape.\(^\text{10}\)

In the early 17\(^{\text{th}}\) and 18\(^{\text{th}}\) centuries apes and monkeys from various continents were collectively known as orang-outang, with much speculation as to their origins. Dutch anatomist, Nichlaas Tulp, had the opportunity to examine either a chimpanzee or bonobo that had been brought back on a trading ship, most likely from Angola, but with doubt as to its origin. This was a gift for the pleasure of the Prince of Orange, Frederick Henry. Tulp referred to this animal as an orang-outang (from the Malay language) or Homo sylvestris. He gave the specimen the name Satyrus indicus, thus adding some confusion regarding its true nature, but evidently with influence from Pliny’s description. The image (figure 4a) appeared in Observationes Medicæ, sometimes referred to as a book of monsters because of its graphical depiction of various physical disorders, published in 1652.\(^\text{11}\) Another book of monsters was published in 1642 by Ulysses Aldrouandi entitled Monstrorum Historia. Aldrouandi depicted (as male and female) the Cinnaminiae gentis, a dark-coloured human being covered in hair, which he described as “hominum sylvestrium”; that is wild man of the forest (figure 4b). He placed the satyrs in the same group, and depicted various forms including goat-footed and feline forms.

Jacob de Bondt (Jacobus Bontius), from his travels to Java, also graphically illustrated an ‘Oorang Outang,’ or wood-man (Homo silvestris) with the characteristics of a hairy human female, remarkably similar to that of Aldrouandi (figure 4c).\(^\text{12}\) This work was written in 1631, but first published by Willem Piso in 1658, after Bondt’s death, and after Tulp’s account of the chimpanzee. Similar terminology was used for apparently very different creatures by Bondt and Tulp. Bondt claimed to have seen first-hand both sexes walking on two feet, and that the females showed some human emotions and modesty. These beings he likened to the satyrs of Pliny, believing further that they were actually human-ape hybrids. He relayed indigenous claims that they could talk, but merely did not want to out of fear of forced labour, although he likely copied such claims from Richard Jobson’s The Golden Trade (1623).\(^\text{13}\) Bondt’s sightings, if real, were most probably of the orangutans, but he appears to have borrowed from other authors. More significantly, Jenson noted that Bondt’s drawing, evidently adapted from the images of Aldrouandi, Genser, and Breydenbach, had an extraordinary career as an illustration in zoological literature across Europe, over a period of two centuries.\(^\text{14,9}\)

In England in 1698 Edward Tyson, an anatomist and member of the Royal Society, had an opportunity to dissect an imported chimpanzee, referring to it as a pygmie. He compared his dissection with human anatomy, and existing knowledge gained from studies of apes (albeit not especially accurate ones). He concluded that his specimen was probably the closest possible link between ape and man. He thought
it was able to walk upright, had speech organs similar to humans, and a sizeable brain, but at the same time it was still an animal because there was no evidence that it was capable of speech.

“... that tho’ our Pygmie has many Advantages above the rest of it’s [sic] Species, yet I still think it but a sort of Ape and a meer [sic] Brute; and as the Proverb has it..., An Ape is an Ape, tho’ finely clad [emphasis in original].”

His colleague, William Cowper, graphically portrayed it with some human-like appearance standing with a stick (figure 5). But the overall view of Tyson was that the orang-outangs and pygmies were animals and not human, despite drawing comparisons between the two. In fact, he wrote that all claims of strange creatures from ancient Greece were probably sightings of apes or monkeys, and that conclusion should have been the end of the matter for science.

“I shall accordingly endeavour to make it appear, that not only the Pygmies of the Ancients, but also the Cynocephali, and Satyrs and Sphinxes were only Apes or Monkeys, not Men, as they have been represented.”

Unfortunately, by calling his specimen a pygmy he blurred the distinction between apes and humans. The pygmy seems to have been understood from antiquity as a tribe of dwarf humans. And the accuracy of his work was called into question by Peter Camper (discussed below). The later drawing of the mandrill by William Smith (A New Voyage of Guinea, 1744), also helped to keep alive belief in human-like creatures that lived in the forest through the 18th century (figure 6).

Linnaeus

The connection between apes and human beings was strengthened by Linnaeus’ developing classification from 1735 to 1758. He considered that his endeavour, as a believer in special creation, was to function as a second Adam in naming animals and plants, and placing them within an intelligently designed plan. His plan was however influenced by the Aristotelian great-chain-of-being in which there could be no missing links. It was a hierarchical system and not evidence of an evolutionary progression, but he believed there were designed “missing links” between apes and human beings; links that he intended to identify.

Controversially, in his 1758 classification the genus Homo was placed within the Primate order, and broken down into two subgenera, which were Homo diurnus and
Homo nocturnus (Homo troglodytes). The latter included the orang-outang as described by Bondt, and other apes and chimpanzees. The orang-outang or Homo sylvestris was said by Linnaeus to only come out at night, was covered in white hair and possessed a cat-like third eyelid (Membrana nictitante). He repeated claims by Bondt and Kjoep that it could even speak, but only with a hissing tone.\(^{18}\)

Homo diurnus was subdivided into Homo sapiens, Homo monstruosus, and Homo ferus, thus including separate references to feral children and severely disabled human beings. But the more controversial aspect of this plan was placing monkeys and apes within the genus Homo, thus seemingly removing the distinction between animals and man, with loss of the uniqueness of man as the divine image bearer.\(^{19}\)

In his thinking, the divine image in man was an invisible spiritual quality, while his classification scheme stressed anatomical similarities between apes and man without reference to sacred texts.

At this time exaggerated popular references to imaginary beasts were still informing science, and the uniqueness of human beings was being undermined by naturalistic commitments in science. John Locke had considered that attempts at classifying human beings were often arbitrary and based upon inadequate subjective criteria, although he recognised the uniqueness of human language and the distinctiveness of complex reasoning.\(^{20}\) But the separation of mankind from the other animals using only natural means became very problematic within the context of naturalism, especially when physical or mental defects, that may limit stature or rational ability, were considered.

Linnaeus’ scheme was illustrated further in 1760 by four images presented under the title Anthropomorpha by Linnaeus’ student Christian Emmanuel Hoppius as part of his academic dissertation (figure 1).\(^{21}\) The term Anthropomorpha was, incidentally, first coined in 1693 by John Ray to denote ‘nail bearing’ or ‘anthropoid’ animals, although humans were excluded by Ray because of his belief in the sacredness of humanity.\(^{22}\) Hoppius’ dissertation was overseen and published by Linnaeus, which suggests it reflected Linnaeus’ view
regarding these entities, as Thomas Huxley later suggested. From left to right the illustrations gradually become more ape-like: with increasing crouch, an increasingly ape-like head, and more ape-like hands and feet (figure 1). They were named: TROGLODYTA Boentii, LUCIFER Aldrouandi, SATYRUS Tulpii, and PYGMAEUS Edwardi. While the Hoppius’ drawings were not considered to be an evolutionary progression by Linnaeus, the images seem to have been falsely and imaginatively modified from earlier drawings to fit into his scheme.

The first image on the left (figure 1) was called TROGLODYTA Boentii. This image was modified from Bondt’s imaginary impression of the orang-outang; a forest-dwelling creature that he considered to be an ape-human cross-breed. Hoppius modified Bondt’s impression to give it shorter hair (figure 4). Brown suggests Bondt’s image was influenced by Gessner’s drawing of 1551 in Historiae Animalium, and Breydenbach’s sketch of 1486 in Pilgrimage to the Holy Land, although there is also some commonality with Aldrouandi’s work. Linnaeus considered that this creature was a species of Homo nocturnus.

The second image from the left (figure 1) was entitled LUCIFER Aldrouandi, primarily influenced by Gesner and Breydenbach’s drawings (figure 2). However, the given name is perhaps a reference to a 1637 copy by Aldrouandi. The earlier drawing of Breydenbach was most probably that of a baboon: Brown suggests that Breydenbach’s image is possibly derived from ancient Egyptian iconography of Thoth, often portrayed as a baboon with a staff. Hoppius referred to it as a cat-tailed person, and Aldrouandi’s image does contain feline features, as also did one of Aldrouandi’s satyrs in Monstrorum Historia. Linnaeus considered it to be Homo caudatus; a tailed third species of man. The clearly ape-like face and feet of the earlier drawings have been modified by Hoppius into a more human-like impression, and was used to fit Linnaeus’ scheme. So, Breydenbach’s baboon became almost human.

The third image from the left (figure 1) SATYR Tulpii is adapted from an engraving by Gérald Jean Baptise Scotin’s II, clearly marked as a chimpanzee in 1738 (figure 7). The graphic impression drawn by Hoppius depicts more human-like features, but without the teacup. Linnaeus considered it might be the species Satyrus sylvestris.

The fourth image on the right (figure 1) is PYGMAEUS Edwardi, which is a copy of George Edwards Man-of-the-Woods (figure 8). This is a drawing of the animal that Tyson had described, which he noted was known as the chimpanzee from Africa. Edwards thought he could offer a more accurate drawing, but also relayed reports of satyrs or orang-outangs from Asia, which he speculated might be more human-like than his chimpanzee.

**Comte de Buffon and Lord Monboddo**

Buffon challenged Linnaeus’ views on the basis of his own study of apes, possessing a live specimen from Africa (called Jocko or Enjocko from the Congo), but he relied upon the reports of travellers for the large orang-outang from Asia (this animal he called Pongo). His Jocko did not speak, not even in a hissing tone, and displayed no more intelligence than a well-trained dog, despite having some superficial similarity to humans. Because Linnaeus also relied on reports from Bondt and Kjoep, Buffon doubted that sightings of the large orang-outang had been made accurately, or speculated that the creature with its white skin and hair was an African albino.

Buffon’s study was apparently set against an evolutionary connection between humankind and the apes, and he appeared to have maintained a distance between humanity and the rest of the animal realm. He considered the capacity for human reason and complex language to be a spiritual endowment from God, and this could not be acquired naturally. He was also open to acceptance of some evolutionary change among certain living organisms over extended periods of time. But such differences he thought were possibly due to degeneration from the original perfect forms: for instance,
he considered that the donkey may have been a degeneration of the horse. 30 However, Darwin found Buffon difficult to understand and thought his views often “fluctuated greatly” during his lifetime. 31 Buffon was of course concerned to protect his reputation and position at the Jardin du Roi in Paris, and was perhaps guarded in expressing his actual beliefs in relation to evolution. Other writers in France in the early and mid-18th century, such as de Mailliet and Diderot, were expounding the possibility of some forms of evolution. 32

In the late 18th century Lord Monboddo was more determined to identify an evolutionary link between humans and apes. He practised as a judge in Scotland, and was otherwise known as James Burnett (1714–1799) (figure 9). Monboddo was influenced by the Greek philosophers, and he argued that the Aristotelian great chain of being should extend from apes to man via a gradual process of evolution. He continued to accept the accounts of travellers regarding the orang-outang, and with credulity the existence of the strange Plinean beings from the ancient world. He was mocked for suggesting men once had tails. His arguments were put forward in two volumes: Of the origin and progress of language (1773–1792), and Antient Metaphysics (1779–1799). Therefore, he rejected the evidence-based opinion of Tyson and Buffon that apes and human beings were clearly different and separately created entities. Monboddo maintained, without evidence, that apes and monkeys possessed a rudimentary language, thus reinforcing the link to mankind and worked doggedly in support of his position. 6

He also speculated that early man had lived peaceably close to nature and had a primitive language. To support his view, he proposed a number of experiments and studied several accounts of feral children. Monboddo’s acquaintance, Jean-Jacques Rousseau, had earlier argued for the social evolution of mankind from a state of nature, with early man living in blissful ignorance like the apes. However, Rousseau was less willing to argue for the biological evolution of mankind, believing that early man had the present physical form even though only possessing animal-like mental capacities. 33

Monboddo also rejected anatomical studies by Peter Camper that found no evidence of speech organs on the orang-outang—this on the basis that Camper’s animals came from Borneo and not from the place of Tyson’s specimen (probably Angola). 34 Camper’s conclusions were significant in view of the fact that he had dissected a good number of animals in his work. Camper commented:

“Having dissected the whole organ of voice in the Orang, in apes, and several monkies, I have a right to conclude, that Orangs and apes are not made to modulate the voice like men: for the air passing by the rima glottidis is immediately lost in the ventricles or ventricle of the neck, as in apes and monkies, and must consequently return from thence without any force and melody within the throat and mouth of these creatures: and this seems to me the most evident proof of the incapacity of Orangs, apes, and monkies, to utter any modulated voice, as indeed they never have been observed to do.”

Camper was also critical of earlier anatomical studies by Tyson, concluding he had overlooked the significance of the detail of the voice organs.

Summary

It is evident that beliefs stemming from antiquity regarding the existence of mythical creatures continued into the early modern period, despite clear statements of caution from Augustine. Popular superstition and mythology filtered into the minds of many academics when faced with new, but limited numbers of primate specimens from Africa and Asia. These were depicted through sometimes poor drawings, which reinforced error through several centuries. Tyson’s analysis from the late 17th century showed that there was a clear distinction between apes and human beings, and he argued persuasively that many of the claims from ancient times were most probably sightings of apes and monkeys. Such rational thinking should have clarified matters for science, although Tyson’s work left an opportunity for confusion, and was later criticised by Camper.

Further confusion arose through Linnaeus’ classification scheme which placed human beings within the Primate order, alongside apes and monkeys which were classified within the subgenus Homo nocturnus. This classification was reinforced by the embellished drawings of Hoppius, arguably one of the first imaginative ape-to-man march-of-progress drawings. Although Linnaeus believed in special creation, it was a few years later that Lord Monboddo argued for an evolutionary connection between the apes and human beings.

It is noteworthy that speculation from travellers and popular mythology from antiquity was still informing scientific discourse into the 18th century, and this arguably laid some of the ground work for later acceptance of Darwinian evolution. But the best evidence-based scientific studies from Buffon and Camper showed a clear demarcation between human beings and the other animals. Buffon recognised the important distinctions of intelligence and language, and commented that apes showed no more intelligence than a well-trained dog, although Buffon was sometimes ambiguous in his beliefs. Camper clarified from anatomical studies that apes and monkeys are incapable of speech.

When Darwin and Huxley resurrected the evolutionary link in the 19th century, it was on the basis of comparative brain physiology. Belief in evolution also fed upon an undercurrent of popular mythology that there existed missing
links between apes and men, but the search for the missing links soon passed from the present to the fossil record.

References


3. Augustine, City of God, XVI, chap. 8—Whether certain monstrous races of men are derived from the stock of Adam or Noah’s sons, and chap. 9—Whether we are to believe in the Antipodes; in: Schaff, P. (Ed.), Nicene and Post Nicene Fathers, series 1, vol. 2., T&T Clark, Edinburgh, 1979.

4. Augustine, ref. 3.


8. See: Davies, H.W., Bernhard Von Breydenbach and His Journey to the Holy Land 1483–1484: A bibliography, Haemjens Dekker and Gumber, p. xvii & 42, 1968. Breydenbach also drew the ape beneath a unicorn, which calls into question the authenticity of all the other sightings.


10. Gesner, C., Medici Tigurini Historiae Animalium, book I, De Quadrupedibus uuiipariss, Christoph Froshoverum, Tiguri, Zurich, p. 970, 1551. Gesner attributes these discoveries to the ancient Greek historian Megasthenes—the large monkeys came from Prasiana Indorum (Sindh, India) (de simiis sive cercopithecis Prasiani et alii magnis).


13. See Brown, ref. 7, p. 33, with quotes from Jobson, R., The Golden Trade, London, Nicolasp Okes, p. 153, 1623. Jobson relays favourably the opinion of the Spaniards that the Babowne may be considered “a race and kind of people, who in regard they will not bee brought to worke, and live under subjection, who in the East Indies


15. Tyson, E., Orang-Outang, sive Homo sylvestris: or the anatomy of a Pygmeie compared with that of a monkey, an ape, and a man. To which is added, a philological essay concerning the pygmies, the cynocephali, the satyrs, and sphinges of the Ancients. Wherein it will appear that they are all either apes or monkeys, and not men, as formerly pretended, London, p. 82, 1699. Proverb is from Lucian, adversus indoctum.

16. Tyson, ref. 15, p. 2.


24. von Breydenbach, B., Peregrinatio in Terram Sanctam (Pilgrimage to the Holy Land), Published by Pablo Hurus, p. 172, 1498 (first published 1486). Breydenbach also drew a picture of the devil, in conversation with Jesus, which is similar to his ape. Also see Huxley, ref. 23, p. 23.


29. Blancke, ref. 6, pp. 31–44. Classification from Linnaeus, C., Systema Naturae, 10th edn, Laurentii Salvii, Stockholm, 1758.


