

# [How different from monkeys are we truly](https://assignbuster.com/how-different-from-monkeys-are-we-truly/)

Humans have long considered ourselves profoundly and utterly different from all other animals, but recent evolutionary biology has begun to challengethis assertion. By placing humans on a continuum with other animals, and demonstrating genetically how closely related we are to other great apes (especially chimpanzees and bonobos) modern science has made researchers as the questions: what makes humans different? and, possibly more provocatively, how different are we truly?
Genetically humans are very similar to chimpanzees, and were even more closely related to a wide array of pre-human ancestors (Tattersall, 2002). But there are several things that mark us as being different from many of these other animals. Some of them are purely physical – for instance we have bipedal motion that is absent in the rest of apes (Tattersall, 2002 p. 89). But we also have many metaphysical qualities that mark us as different from our ancestors, such as the creation of music, art and culture. There is no one single thing that can truly account for all the ways in which we are different, but there are a few pieces that had to come together. One of which is our brain, which is by far the largest brain compared to body mass of any animal in the history of the world (Tattersall, 2002, p. 151). This probably had to develop in conjunction with a lot of other developments to be useful – for instance, larger brains would not have been useful if we were not already prehensile apes who were adapted to living in trees, and could thus use our prehensile hands to create and use tools (Tattersall, 2002 p. 69). But probably one of the single things that sets humans apart from other animals the most is the development of speech. A change in our voice box and brain simultaneously occurred at some point in the evolution of homo sapiens, which allowed humans to differentiate themselves from previous iterations of humanity (or pre-humanity), and begin to do things that are truly novel in the animal kingdom Tattersall, 2002). One of the things that makes language so important is that it augments our innate intelligence, so that instead of things that become created instantly dying out when the person who created them dies, they can pass on the teaching to succeeding generations. This creates culture, which is probably the one biggest things that separates humans from other primates and other animals.
If Gould and Tattersall were to have a conversation with each other, they would probably come to cross roads. Gould tended to entirely dissociate brain size and shape from intelligence, whereas Tattersall indicates that increases in brain size were associated with increases in intelligence amongst developing homo sapiens (Gould, 1981, Tattersall, 2002). Part of the problem is that they are largely talking about two different things – Tattersall is comparing one species to another, and charting the development in a species where each specimen is incredibly genetically diverse, whereas Gould was addressing comparisons between individuals within the homo sapiens species (Gould, 1981, Tattersall, 2002). This is something of an apples to oranges comparison – it is perfectly possible that a species of early humans with smaller cranial capacity would be less intelligent, whereas even if that is true that correlation might not exist between examples of extant humans.
One of two thought-provoking quotes is: “ If geometric art was never created, would we one day be transliterating our newfound language into written form?” which I think is very interesting because it shows how deep the connections are to our pre-historic ancestors (Tattersall, 2002 p. 202). I think that this art was probably less important than Tattersall makes it out to be, and the connection between early geometric art and written language which came hundreds of thousands of year later. Another is “ perhaps we’re playing an evolutionary game to different rules (Tattersall, 2002 p. 9). I think this is spot on, and that humans are no long evolving in the way we used to.
Works Cited
Gould, SJ (1981). The Mismeasure of Man. New York, NY: Norton.
Tattersall (2002). The Monkey in the Mirror: Essays on the Science of What Makes Us Humans. New York, NY: Harcourt.