

Comparing and contrasting neanderthals and modern humans



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Neanderthals have long thought to be lesser than modern humans in many ways, such as intelligence, wit, appearance, and ways of life; however, this is not entirely the case. The first Neanderthal discovered was in the Neander Valley of Germany, where part of a skull and limb bones were present (“Neanderthals | Evolution | Earth Facts,” n. d.). Although this is not the oldest Neanderthal skeleton ever found, it was the first and it led to the discovery and understanding of a whole new species.

This species was known to us as *Homo sapien neanderthalensis*, or for those who believe the differences to be so vast that it should be its own distinct species, *Homo neanderthalensis* (O’Neil, 2010). *Homo (sapien) neanderthalensis* and *Homo sapiens* lived side by side for thousands of years (O’Neil, 2010), but it is speculated that it was because of the advanced nature of *Homo sapiens* which allowed them to thrive and eventually outlive the Neanderthals.

Although the Neanderthals eventually became extinct and *Homo sapiens* thrived, there are many similarities in both appearance and behaviour that suggest that perhaps the few differences that exist between the two were the difference that allowed for one species to prevail while the other faded out. Neanderthals and modern humans have many similarities in appearance which include, but are not limited to, the size of the cranial capacity and shortened limbs.

The cranial capacity of a Neanderthal varies from 1200 to 1750 cubic centimeters (O’Neil, 2010) with an average of 1400 cubic centimeters (Haviland, & Crawford, 2009) with a modern human varying between 900 to

1880 cubic centimeters (O'Neil, 2010) and an average of 1300 cubic centimeters (Haviland, & Crawford, 2009), respectively. It has been speculated that this was only because of the difference in size between Neanderthals and modern humans and when compared to those of similar size, a similar cranial capacity was present (Berger, 2010).

Aside from similarities in cranial capacity, the Neanderthals and modern humans had many other physical similarities. The shortened limbs of both Neanderthals and modern humans is evidence of a lifestyle that is no longer arboreal, compared to past ancestors. As well, with a non-arboreal lifestyle, bipedalism soon became a way of life for the Neanderthals as it is today with modern human allowing further traveling, a way to see prey, and the ability to better defend ones self if the need be. And although the Neanderthal pelvis is not imilar to that of anatomically modern humans, the " dimensions of the pelvic outlet are fully consistent with those of a modern woman of the same size" (Haviland, & Crawford, 2009). Irrevocably, Neanderthals and moderns humans have clear similarities in appearance. Despite Neanderthals and modern humans having many similarities in appearance, there are also many unique characteristics which set them apart.

Neanderthals were typically short statured with a compact body which allowed them to hold bodily heat (Evans, 2009), a qualification which made them more efficient in the cold climates of Europe and Asia they resided in (Moore, 2008).

This stalky, muscular build of the Neanderthals also allowed them to have a high endurance, a characteristic beneficial to both traveling and hunting (Haviland, & Crawford, 2009). Their shoulder blades in particular were an <https://assignbuster.com/comparing-and-contrasting-neanderthals-and-modern-humans/>

important part of their muscular build as they allowed the Neanderthals to have powerful overarm and downward thrusting movements (Haviland, & Crawford, 2009), a favourable trait for hunting both small and large game. The pelvis of Neanderthals were also dissimilar from those of anatomically modern humans due to “posture-related biomechanics” (Haviland, & Crawford, 2009).

The Neanderthals typically had long heads from front to back, primarily related to the slightly larger cranial capacity and the occipital bun, a projection of the occipital bone, which was key for the attachment of powerful neck muscles (Haviland, & Crawford, 2009). Their faces had a swollen appearance in the mid-facial region, and nose and teeth projection was usual, along with a lack of chin and a prominent brow ridge. The large noses they possessed allowed the frigid air of their climate to be warmed and the dusty air cleaned and moistened (Haviland, & Crawford, 2009).

The Neanderthals also possessed worn teeth which suggested that aside from chewing, they used their teeth as tools for both holding and stripping things (Hirst, K. K. , n. d.). The Neanderthals were also quite similar in terms of behaviour in comparison to modern humans. Speech, the arts, and social groups were all behavioural characteristics in which Neanderthals had common traits with modern humans. It has been long discussed whether or not Neanderthals were capable of speech and if so, if they even had a spoken language.

With necessary neural development, a hypoglossal canal like that of modern humans, an expanded thoracic vertebral canal, and the shape and position

of the hyoid bone adequate, it is quite likely that Neanderthals had some form of spoken language (Haviland, & Crawford, 2009). Whether it was in the form of grunts, or an elaborate dialect, it is a definite similarity to modern humans. Like speech, another similarity to modern humans Neanderthals possess is the practice of caring for their sick and elderly, and burying their dead.

During this process, graves are dug, bodies are positioned in a traditional arms folded over chest way, and flowers were often placed (Haviland, & Crawford, 2009). The graves in this case were typically in shallow pits, shallow excavated graves, or nature fissures (Hirst, K. K. , n. d.). In likeness to modern humans the arts played a large part of both Neanderthal lives, through paintings and murals, carving and engraving, and music. Paintings and murals by Neanderthals were typically done with the use of pigments, while carvings were typically done with rock tools.

Most cave art was done of animals such as horses, deer, and bison which they may have been symbolized or worshipped in their cultures. It has also been speculated that Neanderthals used instruments such as flutes made of bone (Haviland, & Crawford, 2009). When not expressing themselves, Neanderthals lived in small nuclear families and were involved in social networking, such as “ interaction between family or neighbouring groups” (Hirst, K. K. , n. d.), a behaviour almost identical to that of modern humans.

Neanderthals, although having numerous similarities in behaviour to modern human, also have distinct behavioural differences. Hunting and food-gathering techniques, tools, and diet are all major fields in which there is

variance. The Neanderthals were nomadic peoples, grazing the land and hunting for food (" Neanderthal nomads," 2008). They were mainly carnivores, with less plant material in some cases due to fresh foods available only seasonally in colder climates (Haviland, & Crawford, 2009).

The game meat provided much needed animal fats which gave the Neanderthals extra energy for full-time hunting and body heat (Haviland, & Crawford, 2009). To hunt, the Neanderthals used a variety of tools including, but not limited to, hand-axes, flake tools, scrapers, borers, and spears. Their techniques were organized and well thought out, which allowed them to hunt large and potentially dangerous game (Haviland, & Crawford, 2009).

If tragedy struck, a burial was likely in order. Although this is a behaviour quite similar to modern humans, the way in which the Neanderthals were buried makes this process dissimilar. When buried, the Neanderthals were placed in shallow graves rather or natural fissures rather than a deep, professionally dug grave (Hirst, K. K. , n. d.). Neanderthals traditionally left objects in the graves of loved ones, a possible indication of a belief in an afterlife.

These objects include jewelry, hunting weapons, and other objects made from stones or animal bones and teeth, some of which were painted with ochre, a red pigment, which may be an indication of ritual during burials (Moore, 2008). It has also been suggested that there was no systematic teaching within the Neanderthal community. This would have led to each generation having to rediscover the same primitive techniques, rather than building upon what is already known and therefore advancing as a species

(Stolyarov, 2007), especially with a life expectancy of approximately only 30 years of age (Hirst, K. K. , n. d. . There are many different and indefinite theories as to what happened to the Neanderthals, from the rapid growth of modern humans in Europe to perishing due to the inability to keep up with the Ice Age (O'Neil, 2010). It is clear though that within the hundreds of thousands of years Neanderthals were present on Earth, they led very successful lives. It is also evident that Neanderthals were very similar to modern humans of today in both appearance and behaviour, and yet they had key differences which set them apart and eventually led to their extinction and the allowed for the continuation of the human species.