Neanderthal Culture

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Neanderthals lived a much more complex lifestyle than most people know. I was surprised to find out how well established they are as I was doing my research. They had strong and robust bodies that helped them survive. They had large cranial capacities, which made them intelligent. The Neanderthals also developed many tools that made their daily lives easier. They were supposedly able to communicate with each other. They took care of their sick and wounded, and held burial ceremonies for those who didn’t make it. They had symbolism in their culture such as cave art, musical instruments, and carved ivory.

“Neanderthals lived from 30,000 to 125,000 years ago in Europe and Asia (Haviland, Prins, Walrath, & McBride,2011, pg 192). “Both fossil and genetic evidence indicate that Neanderthals and modern humans (*Homo sapiens)* evolved from a common ancestor between 500,000 and 200,000 years ago. Neanderthals and modern humans belong to the same genus (*Homo*) and inhabited the same geographic areas in Asia for 30,000–50,000 years; genetic evidence indicates while they may have interbred with non-African modern humans, they are separate branches of the human family tree (separate species)” (Smithsonian's National Museum of Natural History, 2010). It wasn’t until 1856 in Germany, when the very first Neanderthal specimen was found. It was named Homo neanderthalensis when it was found in a cave in the Neander Valley in Germany (Smithsonian's National Museum of Natural History, 2010).. But after the Neanderthal 1 was found “scientists realized that prior fossil discoveries—in 1829 at Engis, Belgium, and in 1848 at Forbes Quarry, Gibraltar—were also Neanderthals” (Smithsonian's National Museum of Natural History, 2010). In the 1950’s, another set of remains were found in Shanidar Cave in Iraq (Trinkhaus, Eric 1983 pg 4). After making so many discoveries, scientists were eager to find out more about the remains of these human like creatures and how they lived their life. It was shocking for them to find a species that was so similar to humans.

 “Neanderthals were generally shorter and had more robust skeletons and muscular bodies than modern humans” (Dorey, F. 2015, October 30). On average, male Neanderthals were around 168 cm, about 5 foot 5 inches, and females were 156 cm, or 5 foot 1 inch (Dorey, F. 2015, October 30). However,“ both sexes were muscular, with extremely robust and dense limb bones” (Haviland,et al,2011, pg 193). Even though their heights were different, the structure of their bodies were quite similar. They all had incredibly strong bones that could support their activities of daily life. The cranial capacity of the Neanderthal was 1,400 cc, and for modern humans it is 1300 cc. (Haviland, et al, 2011, pg 193). This means that their brain size was much larger than modern humans (Dorey, F. 2015, October 30). Having the larger cranial capacity than humans led them to be able to make technological advancements we had no idea they were capable of. “ Neanderthals were generally heavier and more muscular than modern humans” (Dorey, F. 2015, October 30). Their jaws and teeth were huge in comparison to humans (Dorey, F. 2015, October 30). “ They had prominent bony brow ridges over their eyes. On the back of their skull, there was a bun-like bony mass for attachment of powerful neck muscles” which helped to balance the weight of their heavy face (Haviland, et al, 2011, pg 193). “ Neanderthal skulls are notable for the protruding appearance of the midfacial region” (Haviland, et al, 2011, pg 193). “The Neanderthals appear to have lived in relatively small groups, moving frequently on the landscape but reusing the same locations often. This is indicated by the small sizes of their sites and by the considerable depth of debris at a number of sites. The materials left behind show only minor variations among sites, suggesting that there was little planned differential use of the landscape—one site seemed to serve as well as another for most purposes” (Trinkaus, E., & Tuttle, R.H., January 2015). The Neanderthals didn’t stay in one place for long and they always stuck together as a group.

 Many of these features in their bodies allowed the Neanderthals to survive in the harsh freezing climates. For example their large noses were crucial in order to “ warm, moisten, and clean the dry, dusty, frigid air of the glacial climate, preventing damage to the lungs and brain as seen in cold-adapted people of recent times” (Haviland, et al, 2011, pg 193). “Numerous studies emphasize the considerable and habitual stresses placed upon an extremely muscular body from a very young age, stresses which extend towards the physical use of the body as a power tool” (Pettit, P.B., 2000, pg 352). Neanderthals relied on their strong bones and limbs to accommodate for their physically demanding lifestyles. Another factor that led to their survival was the hearths they built “ to control fire for warmth, cooking, and protection” (Dorey, F. 2015, October 30). They normally stayed in caves, but sometimes they had open air shelters instead (Dorey, F. 2015, October 30). To protect them from the cold, it is believed that they would use animal hides, but “ there is no physical evidence that Neanderthal clothing was sewed together, and it may have been simply wrapped around the body and tied” (Dorey, F. 2015, October 30). If it hadn’t been for these adaptations and advancements, the Neanderthals may not have survived as long as they did.

 The cranial capacity of Neanderthals played a huge role “ in technological innovations, conceptual thought, of considerable sophistication, and almost surely, communication through spoken language”(Haviland, et al, 2011, pg 195). Because of their brain size and the abilities they had to process thought, they were able to make incredibly sophisticated tools that helped them survive. The Mousterian tradition was , “The tool industry of the Neanderthals and their contemporaries of Europe, southwestern Asia, and northern Africa from 40,000 to 125,000 years ago” (Haviland, et al, 2011, pg 195). The name of the Mousterian tradition comes from the Neanderthal cave site of Le Moustier, in southern france (Haviland, et al, 2011, pg 196). The Neanderthals made these complex tools that were “ lighter and smaller than those of earlier traditions” and they created smaller flakes that they would “retouch and sharpen”(Haviland, et al, 2011, pg 196). The Neanderthals knew how to make many tools such as “ handaxes, flakes, scrapers, borers, notched flakes for shaving wood, and many types of points that could be attached to wooden shafts to make spears” (Haviland, et al, 2011, pg 196). They used the scrapers to get the flesh off of the animals that they had hunted and to get the marrow from the bones. According to archaeology wordsmith (2017), a borer is “ a flint tool for piercing holes.” The Neanderthals used these on animal bones and wood.

 The Neanderthals were very skilled hunters, instead of casually hunting for food, they” planned and organized hunting of very large and potentially dangerous game” (Haviland, et al, 2011, pg 197). “Neanderthals were active hunters not scavengers and thus had an organized society that could hunt large animals” ( Hays J., March 2011). Their cranial capacities allowed them to plan and work together in order to kill the most prey. They had Mousterian sites that they would bring their prey back to after they killed it. These sites had fire pits and acted as a place for them to butcher the meat and cook it (Haviland, et al, 2011, pg 197). “ At several sites evidence indicates that particular species were singled out for the hunt. For example, at one site in the French Pyrenees, well over 90 percent of the faunal assemblage (representing at least 108 animals) consists of large members of the wild cattle family. These bones accumulated at the foot of a steep riverside escarpment, over which the animals were evidently stampeded” (Haviland, et al, 2011, pg 197). This proves that the Neanderthals were smart enough to know how to get the most out of their hunts. They were able to strategize as a group and lure the animals to a cliff that they would be driven off of. The Neanderthal diet consisted mostly of meat. “Neanderthals ate large animals such as cave bears, aurochs (large, long-horned wild oxen), bison, elk and even wooly mammoths” ( Hays, J. March 2011). However, they did include some plant life in their diets, but it acted as more of a supplement to the meat. (Hays, J. March 2011). They were not as focused on gathering foods such as plants and berries nearly as much as they were on hunting.

 The Neanderthals were capable of speech, but it is unknown whether it was coherent as we speak today, or if it was more of using gestures to communicate. “ Specific anatomical features can be examined to determine whether this language was spoken or gestural” ( Haviland, et al, 2011, pg 199). The shape of their larynx and hyoid, two structures that facilitate speech and communication, was the same as humans today, which tells us that they had all of the structures needed to speak (Haviland, et al, 2011, pg 199). Additionally, paleoneurologists were able to use endocranial casts to investigate the brains of the Neanderthals, and they found that their brains were developed enough for speech (Haviland, et al, 2011, pg 199). “Neanderthals posses the same version of the gene FOXP2, which has been linked it speech and language, as humans” (Hays, J. March 2011). So, Neanderthals had all of the necessary implements for speech, but there is no concrete evidence that they had the same sort of spoken language as we do. But, I believe that there was some kind of audible communication between them. They must have had to communicate to hunt and kill their prey and survive in the harsh climate.

 One of the most fascinating things about the Neanderthals is that they participated in burial ceremonies. “ Several sites contain clear evidence for deliberate burial of the dead. This is one reason for the relative abundance of reasonably complete Neanderthal skeletons” (Haviland, et al, 2011, pg 197). When a member of their group died, they would position them in a specific way (Haviland, et al, 2011, pg 197). “ A Neanderthal male between 25 and 35 years of age was placed in a pit on his back, with his arms folded over his chest and abdomen” (Haviland, et al, 2011, pg 197). The positioning of the bodies found shows that they did not just naturally decompose and become covered by the soil, it proves that graves were dug in the ground for bodies to be placed in (Haviland, et al, 2011, pg 198). By performing pollen analysis, scientists were able to see that “ flowers had been placed below the body and a wreath about the head” (Haviland, et al, 2011, pg 198). This indicates that flowers were placed with dead bodies, perhaps to honor them. This is where we first began to see burial ceremonies and funerals. Additionally, “ Neanderthal social organization had developed to the point of providing care to the physically disabled members of the group. For the first time, the remains of old people are well represented in the fossil record” (Haviland, et al, 2011, pg 197). This shows that even before death, the weakest members of the group were taken care of, and upon death, they were buried respectfully. “ Many elderly Neanderthal skeletons show evidence of treatment for trauma, with extensive healing of wounds and little or no infection” (Haviland, et al, 2011, pg 197). This is incredibly interesting because it shows that they cared about the members of their group and were smart enough to help cure them when there was an injury or illness.

 “Other symbolic behavior in Mousterian culture comes from the naturally occurring pigments: manganese dioxide and the red and yellow forms of ochre. Recovered chunks of these pigments reveal clear evidence of scraping to produce powder, as well as facets, like those that appear on a crayon” (Haviland, et al, 2011, pg 198). Neanderthals used these pigments to draw depictions on the walls of caves, which often included some sort of hunting scene. According to Hays, J. (2011), “A few examples of Neanderthal art have been found. They include perforated and grooved animal teeth, and ivory rings. A carved and polished ivory tooth from a baby mammoth, and elk and wolf teeth with holes that may have been worn as pendants were found in a French cave near Arcy-sur-Cure” (Hays, J. 2011). So this indicates that the Neanderthals did not only paint on the cave walls, but also carved ivory and teeth with ornate decorations. In Slovenia, there was a discovery of a “hollow bone with perforations,” which was thought to be some type of musical instrument, such as a flute ( Haviland, et al, 2011, pg 198). There is great debate on whether the object was actually a musical instrument or if it was “ nothing more than a cave bear bone that was chewed on by carnivores- hence the perforations” (Haviland, et al, 2011, pg 198). It is very hard to tell because “ the object is fragmentary; surviving are five holes, four on one side, and one on the opposite side. The regular spacing of the four holes, fitting perfectly to the fingers of a human hand, and the location of the fifth hole at the base of the opposite side, at the natural location of the thumb all lend credence to the flute hypothesis” (Haviland, et al, 2011, pg 198). This leads back to the intellectual capabilities of the Neanderthals and whether or not they were able to perform activities like these (Haviland, et al, 2011, pg 198).

 “Neanderthals and modern humans may have had little direct interaction for tens of thousands of years until during one very cold period, modern humans spread across Europe. Their presence may have prevented Neanderthals from expanding back into areas they once favored and served as a catalyst for the Neanderthal’s impending extinction. Over just a few thousand years after modern humans moved into Europe, Neanderthal numbers dwindled to the point of extinction. All traces of Neanderthals disappeared by about 40,000 years ago” (Smithsonian's National Museum of Natural History, 2010).

In conclusion, the Neanderthals were a remarkable group of human like creatures. Their behaviors surprisingly mimic modern humans fairly closely. They lived in groups, they strategically hunted to get food, and they were able to use tools to prepare their food and make improvements to their lifestyle. Their brains were larger than humans today and their bodies were way more muscular than the average human. They needed their strong bodies to survive in the harsh glacial climates. They took care of the injured and sick, and deliberately buried their dead. The appearance of humans in Europe may have led to the decline of the Neanderthal species. I found it very interesting to research the culture and beliefs that were held by the Neanderthals.

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