**THE REINTERPRETATION OF NEANDERTAL LINGUISTIC CAPACITIES AND ITS CONSEQUENCES**

The names of Neanderthals have become synonymous with primitive behavior. But they may actually have been the most advanced group of primates besides modern humans, and despite their stocky bodies and thick skulls, may have possessed intelligence almost on par with ours. Neanderthals, like modern humans, belong to the group of primates that scientists classify as the genus Homo. They lived in Europe, the Middle East and parts of western Asia from about 500,000 years ago to as recently as 30,000 years ago. The Neanderthals were an inarticulate not quite human species, arguing instead that they were probably not very different biologically or cognitively us, and that their linguistic capacities were closely similar to our own.

The Neanderthals lacked language as we know it, using instead perhaps some form of protolanguage. First, general anatomical differences were suggestive of considerable evolutionary distance from modern humans, with Neanderthal robustness taken to imply strength compensating for restricted intelligence. Second, early efforts to extract and analyze ancient DNA focused on mitochondrial DNA and seemed to point to significant differences between the modern and Neanderthals genomes. Third, the recovery of parts of the fossil vocal tract and auditory system was taken to suggest important differences between Neanderthal and modern human speech capacities.

Anthropologists announced they have created a complete Neanderthal genome using ancient DNA samples. Neanderthals, the closest ancestor to modern humans, became extinct over 30, 000 years ago. Fossil evidence suggests that Neanderthals were muscular, with broad shoulders and strong limbs. There are many similarities and differences between Neanderthals and Modern Human. Principally, the Neanderthals are: lower, larger skulls, larger brow ridge, larger shoulder joint, larger, broader rib cage, larger elbow joint, shorter forearm, larger hip joint, larger thicker knee, shorter, more flattened lower leg bone, larger ankle joint. His assessment of the Neanderthal skull was startling. It was 20% larger than the average size of a modern human's brain, and anatomically identical. He could tell that this Neanderthal was right-handed and that that the areas of brain responsible for complex thought were just as advanced as ours. He should have had the ability to think like us. The other difference between the Neanderthal and modern human is that the Neanderthals are long face mounted in front of the brain case and projecting far forward along the mid line. They hadn't chin and posed long, low brain case. However, the modern human are a short, flat face mounted below the front of the brain case and a short, high brain case. One of the ways we use our brains is very particular. This ability makes us unique in the world today, and arguably makes us human. So was it possible to tell if Neanderthal could have spoken? A tiny bone in the throat, called the hyoid, offered a clue. This bone supports the soft tissue of the throat, and several groups of scientists are attempting to model that soft tissue from the bones and discover what he might have sounded like.

Fossilized parts of the vocal and auditory anatomy provide important information about ancient capacities for speech production and perception. It turns out that there is enough latitude for fierce debates concerning the appropriateness of the models used and their capacity to distinguish competing hypotheses. The possession of articulate speech therefore implies that both production and perception are attuned to each other, so that parameters carrying the bulk of the speech information are optimized in both production and reception. These fossil hominids had a modern human-like pattern of sound perception, which clearly differs from the chimpanzee pattern in the region around 4kHz, strongly supporting the inference that their hearing apparatus could support modern speech perception. The lineages of Neanderthals and modern humans may have initially separated. Even if these fossils belong to the evolutionary lineage leading not to modern humans but to Neanderthals. The range of morphological variation in the Neanderthal ear bones is included within the modern human range and that what may differ are the relative frequencies of these variants in the two populations.

This feature is basically of the Neanderthal speech. However, the Neanderthals are too your own language. Humans are notable for undergoing significant development—cognitive and physiological—after birth. This has significant implications for social structure as well as for language development, which has a long developmental trajectory of 7+ years and requires significant brain post-partum brain plasticity. Turns out Neanderthals may also have a similar ontogenetic trajectory, suggesting similar brain development and social structures that could support more complex language.

Relative to your culture, the Neanderthals and modern humans both descended from a single ancestral species. This ancestral species split into two groups about a million years ago, Harcourt-Smith said. Evidence shows that one group migrated from Africa to Europe just as an ice age began. In Europe, over time, they evolved adaptations to living in a freezing environment, and became what we now call Homo Neanderthals. Neanderthal's large noses and bulky physique were adaptations to the cold.

Finally, there is growing evidence that Neanderthals did have a more complex culture than assumed. They buried their dead, had complex stone tools requiring hierarchical planning, cooked, and possibly made shoes. There is also evidence that they used pigments for certain things.