

Why Did Neanderthals Go Extinct?...are they truly gone?

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Abstract

This study seeks to understand how Neanderthals went extinct, mainly by examining their relationship with early homo sapiens, environmental factors and resource management, and if the use of the word "extinct" is a valid choice in this context. I'm answering this question via a critical lit review, where I have analyzed various academic articles and research papers from the 1980 into 2021. The evolving theories have shown that neanderthals did not simply die out. A moderate population of Neanderthals interbred with early humans, some migrated to much further corners of the globe where they lived out their days and solitude, and others disappeared due to changing climate and resource competition.

Background

Homo *Neanderthalensis* lived between 300,000 and 35,000 years ago, the longest living hominid species, until their total disappearance from the archaeological record 30,000 years ago. For decades, scholars believed that Neanderthals were inferior to modern humans, brutish, grunting cavemen. It was thought for decades that homo sapiens simply outcompeted neanderthals. More recent finds have shown Neanderthal's ability to understand symbolism, care for familial groups and even had language. This completely challenged many past theories regarding neanderthals, their relationship with humans and why they went 'extinct'.

Neanderthal cognition

The FOXP2 gene present in Neanderthal DNA indicates the ability to understand and form language traits.

A burial of Neanderthals found in the Shanidar cave in Iraq, shows the repeated practice of placing flowers buried with the dead, and specific rocks placed with the dead. This indicates an understanding of symbolism and attachment in groups and between individuals.

Cohabitation evidence

Tools from both Neanderthal and Homo Sapien burials can be dated to the same time period. This indicates that homo sapiens and neanderthals existed within the same geographical regions for 3,000-5,000 years. A substantial amount of time for transmission of traits and skills.

shared DNA evidence

Modern human populations share between 1-3% neanderthal DNA. Primarily in those of western european decent and western/eastern asian decent.

Conclusions

Neanderthals did not simply go extinct. Their species did not just cease to exist from the physical world and gene pool of humanity. Neanderthals possessed similar cognitive levels as early hominids, and material evidence has show cohabitation and interbreeding between early homo sapiens and neanderthals, so much so that some populations around the globe have between 1-3% Neanderthal DNA, over 10,000 years after they are no longer found in the archaeological record.

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