

# MIND MATTERS

## COULD NEANDERTHALS SPEAK? IT DEPENDS ON WHO YOU TALK TO

*Theorists who will, sadly, never converse with a living Neanderthal imagine things they could and couldn't do linguistically*

BY **DENYSE O'LEARY** ON MAY 24, 2024 5 MINUTE READ

Our imaginations seem to know a great deal about **the Neanderthals**, for which we have no actual records. That includes things like whether or how they spoke.

An earlier consensus (not based on much hard information) said no. For human evolution theory to make sense, someone must be the **subhuman** and the Neanderthals, extinct as a separate group, were in no position to protest getting classed that way.

In recent years, however, the no-speech consensus has been challenged:

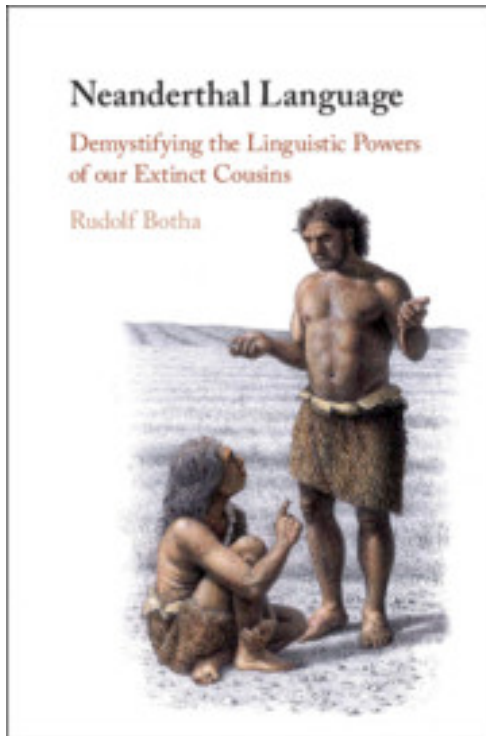
In 2018, Dan Dediu and Stephen C. Levinson **found** that

“ Here we re-evaluate our 2013 paper on the antiquity of language (Dediu and Levinson, 2013) in the light of a surge of new information on human evolution in the last half million years. Although new genetic data suggest the existence of some cognitive differences between Neanderthals and modern humans — fully expected after hundreds of thousands of years of partially separate evolution, overall our claims that Neanderthals were fully articulate beings and that language evolution was gradual are further substantiated by the wealth of new genetic, paleontological and archeological evidence briefly reviewed here.

DEDIU, DAN & LEVINSON, STEPHEN. (2018). NEANDERTHAL LANGUAGE REVISITED: NOT ONLY US. CURRENT OPINION IN BEHAVIORAL SCIENCES. 21. 49-55. 10.1016/J.COBEHA.2018.01.001. THE PAPER REQUIRES A **SUBSCRIPTION**.

The term “wealth” of new evidence is probably comparative. There is just *not* a wealth of evidence about Neanderthals, relative to say, the Roman Empire, and there probably never will be.

## **A language without grammar?**



In 2020, Stellenbosch professor of linguistics **Rudolph Botha** argued in *Neanderthal Language: Demystifying the Linguistic Powers of Our Extinct Cousins* (Cambridge University Press) that Neanderthals “employed linguistic signs akin to those of modern language, but lacked complex grammar.” Maybe, but how could we really know? Are we even sure what such a language would be like?

Reviewer Petar Gabrić, though he had much good to say about the book in general, **commented** at *Frontiers in Psychology*, “to suggest that the smaller size or volume of particular brain areas in Neanderthals compared to modern humans is indicative of both the presence and absence of specific linguistic features in Neanderthals (p. 156) is highly controversial at best. Thus, Botha’s conclusions also appear ungrounded and unwarranted.” At *Times Literary Supplement*, reviewer Joshua Katz **admits**, “as the linguist Rudolf Botha explains in relentless detail, there are no universally accepted beliefs, only ongoing controversies, about the linguistic capacity of our cousins who disappeared as a species between roughly 41,000 and 39,000 years ago.”

## Improper bone structure?

Some researchers thought that Neanderthals could not speak because of an inadequate bone structure. But then in 2021,

“ Researchers at University of Binghamton in New York State and Universidad de Alcalá in Spain recently discovered that Neanderthals did indeed have similar auditory and speech capacities to modern-day humans. The conclusion was reached after various CT scans and 3D models of the ear structures of both Neanderthals and modern humans.

DONNA SARKAR, “DID NEANDERTHALS SPEAK? BREAKTHROUGH STUDY SUGGESTS OUR ANCIENT COUSINS **COULD TALK**,” DISCOVER MAGAZINE, MARCH 25, 2021

That doesn't prove that Neanderthals spoke but, according to the Binghamton team's [open access paper](#), nothing physical seems to have been stopping them.

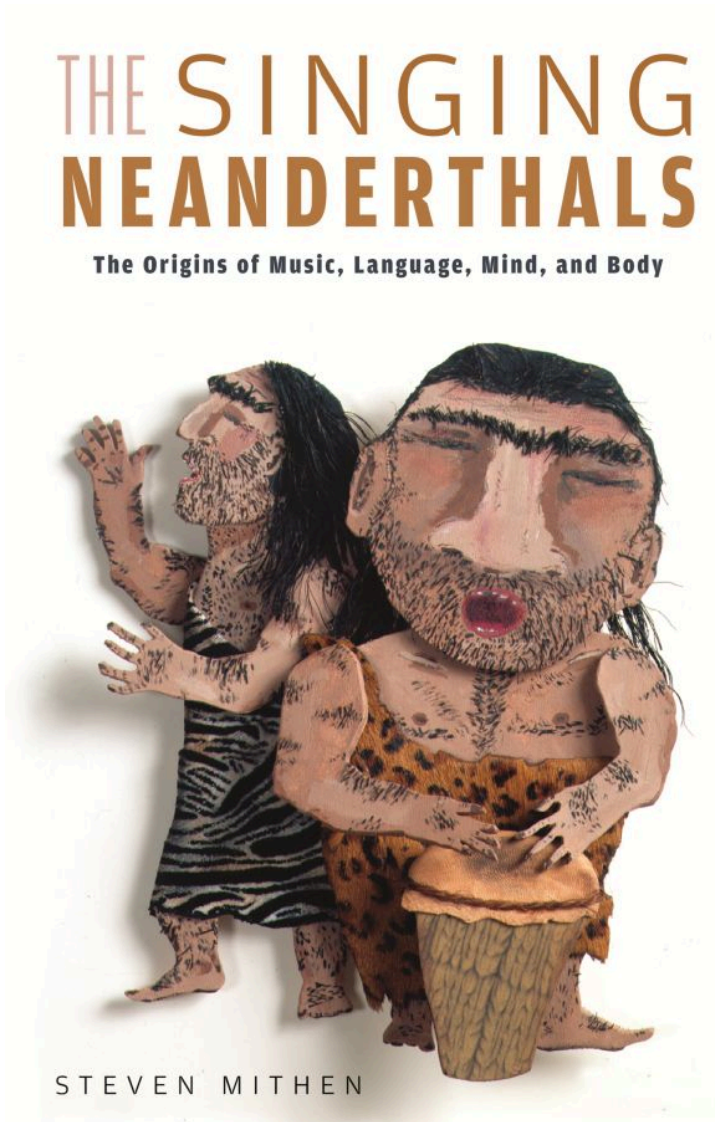
### High-pitched voice theory - Neanderthal - BBC science



Some researchers have theories about how Neanderthals sounded. See what you think.

## Researcher: Yes they could speak — but they could not use metaphors

University of Reading archeologist **Steven Mithen**, for example, tells us that they probably couldn't use metaphors (like "the violin screamed in agony").



How does Mithen, author of *The Singing Neanderthals* (Harvard University Press 2007) know? By the typical shape of skulls we have found:.

“ The Neanderthals had a relatively large occipital lobe, devoting more brain matter to visual processing and making less available for other tasks such as language.

They also had a relatively small and differently shaped cerebellum. This sub-cortical structure, which is packed with neurons, contributes to many tasks including language processing, speaking and fluency. The uniquely spherical shape of the modern human brain evolved after the first Homo sapiens had appeared at 300,000 years ago.

STEVEN MITHEN, "HOW NEANDERTHAL LANGUAGE DIFFERED FROM MODERN HUMAN: THEY PROBABLY DIDN'T USE METAPHORS," THE CONVERSATION, MAY 20, 2024.

Language concepts are stored throughout the brain and Mithen thinks that Neanderthals connected them differently from modern humans. He also thinks that iconic words (words like "crunch," which sound like what they represent) were the bridge between ape and human language. And that, according to computer models, syntax can "spontaneously emerge." He argues that Neanderthals could do all that but that somehow "our species gained the capacity to think and communicate using metaphor" and they didn't. Thus, he says, modern humans can abstract and Neanderthals couldn't.

Does he know that Neanderthals couldn't abstract? No, because we really couldn't know if we can't talk to them.

What we have, 40,000 years later, is a great deal of theory chasing very little evidence. Inevitably, each theorist writes his own story and the rest of us believe whatever seems to make sense.

*You may also wish to read:* Neanderthal Man: The long-lost relative turns up again, this time **with documents**.

## DENYSE O'LEARY

Denyse O'Leary is a freelance journalist based in Victoria, Canada. Specializing in faith and science issues, she is co-author, with neuroscientist Mario Beauregard, of *The Spiritual Brain: A Neuroscientist's Case for the Existence of the Soul*; and with neurosurgeon Michael Egnor of the forthcoming *The Human Soul: What Neuroscience Shows Us about the Brain, the Mind, and the Difference Between the Two* (Worthy, 2025). She received her degree in honors English language and literature.

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