

130 - When did spoken language appear?

We cannot currently be confident when spoken language appeared because (as explained by a poet) “words evaporate like water in a dish, leaving you with a sense of something meant, but not the memory of what was said.”¹ Others have simply noted that sounds do not leave fossils.^{2 3 4 5 6}

Estimates range from more than two million to 50,000 years ago.. These are based on a variety of clues from the archive of ancient human artifacts,⁷ anatomy,⁸ stone tools,⁹ controlled use of fire,^{10 11} symbolic carvings on ancient bones,^{12 13} paintings in caves,^{14 15} speculation about cultural transmission,^{16 17} and presumed religious practices^{18 19}

Independent of when our ancestors first started using spoken language, we are left to question what preceded it and how it evolved.

¹ ‘Words and Things’ by Vinay Dharwadker. In *60 Indian poets*, edited by Jeet Thayil. New Delhi : Penguin Books, 2008. Accessed online 2024-06-09 at <https://cse.iitk.ac.in/users/amit/books/thayil-2008-60-indian-poets.html>

² “The faculty of language: What is it, who has it, and how did it evolve?” Marc Hauser; Noam Chomsky; and W. Tecumseh Fitch. 2002. *Science* 298.1569-79. See pages 1571-1572.

³ *Prologue to Greek literacy* by Eric A. Havelock. Cincinnati : University of Cincinnati, 1971. See page 20/1/3.

⁴ ‘The Evolution of Language and its Speakers.’ Dor, D. (2016) from *The Instruction of Imagination: Language as a Social Communication Technology* by Daniel Dor, published by Oxford University Press. See page 185

⁵ ‘Archaeological Evidence for the Emergence of Language, Symbolism, and Music—An Alternative Multidisciplinary Perspective’ by Francesco d’Errico, Christopher Henshilwood, Graeme Lawson, Marian Vanhaeren, Anne-Marie Tillier, Marie Soressi, Fr’ ed’ erique Frederique Bresson, Bruno Maureille, April Nowell, Joseba Lakarra, Lucinda Backwell, and Michele Julien. *Journal of World Prehistory*, 17(1), 1–70. <https://doi.org/10.1023/A:1023980201043>. See page 2/1/4 of 71.

⁶ ‘The Evolution of Language and its Speakers’ from *The Instruction of Imagination: Language as a Social Communication Technology* by Daniel Dor. Oxford University Press, Oxford ; New York, [2015] See page 1/2/3 of 5.

⁷ ‘How Could Language Have Evolved?’ JJ Bolhuis, I Tattersall, Noam Chomsky, RC Berwick (2014) *PLoS Biology* 12(8): e1001934. doi:10.1371/journal.pbio.1001934, see page 3/1/9.

⁸ ‘The time frame of the emergence of modern language and its implications’ by Dan Dediu and Stephen C. Levinson. In *The social origins of language* / edited by Daniel Dor, Chris Knight, and Jerome Lewis. New York : Oxford University Press, 2014. See page 193.

⁹ ‘On the antiquity of language: the reinterpretation of Neandertal linguistic capacities and its consequences’ by Dan Dediu and Stephen C. Levinson. *Frontiers in Psychology*. 2013 Jul 5;4:397. doi: 10.3389/fpsyg.2013.00397. PMID: 23847571; PMCID: PMC3701805. See page 7/5 of 17.

¹⁰ ‘This Small-Brained Human Species May Have Buried Its Dead, Controlled Fire and Made Art’, Kate Wong, *Scientific American*, June 5, 2023.

¹¹ ‘Hidden signatures of early fire at Evron Quarry (1.0 to 0.8 Mya)’ by Zane Stepka, Ido Azuri, Liora Kolska Horwitz, Michael Chazan, Filipe Natalio. *Proceedings of the National Academy of Sciences of the United States of America*. 2022 Jun 21;119(25):e2123439119. doi: 10.1073/pnas.2123439119. Epub 2022 Jun 13. PMID: 35696581; PMCID: PMC9231470.

- ¹² ‘A 51,000-year-old engraved bone reveals Neanderthals' capacity for symbolic behaviour.’ Dirk Leder, Raphael Hermann, Matthias Hüls, Gabriele Russo, Philipp Hoelzmann, Ralf Nielbock, Utz Böhner, Jens Lehmann, Michael Meier, Antje Schwalb, Andrea Tröller-Reimer, Tim Koddenberg, Thomas Terberger. *Nature Ecology & Evolution*. 2021 Sep;5(9):1273-1282. doi: 10.1038/s41559-021-01487-z.
- ¹³ *Ice Age art : an exhibition of Ice Age art and symbol*, Alexander Marshack, American Museum of Natural History, California Academy of Sciences. San Francisco. 1979.
- ¹⁴ ‘An Upper Palaeolithic Proto-writing System and Phenological Calendar’ Bennett Bacon, Azadeh Khatiri, James Palmer, Tony Freeth, Paul Pettitt, Robert Kentridge. *Cambridge Archaeological Journal*. 2023;33(3):371-389. doi:10.1017/S0959774322000415
- ¹⁵ ‘Context and Dating of Aurignacian Vulvar Representations from Abri Castanet, France’ Randall White, Romain Mensan, Raphaëlle Bourrillon, Catherine Cretin. (May 201) *Proceedings of the National Academy of Sciences* 109(22):8450-5.
- ¹⁶ *The cultural origins of human cognition* / Michael Tomasello. Cambridge, Mass. : Harvard University Press, 1999. ISBN 0674000706. See page 55.
- ¹⁷ *The cultural origins of human cognition* / Michael Tomasello. Cambridge, Mass. : Harvard University Press, 1999. ISBN 0674000706. See page 55.
- ¹⁸ *The shamans of prehistory : trance and magic in the painted caves* by Jean Clottes and J. David Lewis-Williams. Translated by Sophie Hawkes. New York : Harry N. Abrams, 1998.
- ¹⁹ Magico-religious practitioner types and socioeconomic conditions. Winkelman, M., 1986. *Behaviour Science Research* 20(1–4), 17–46.