

**CRITICAL REVIEW: “THE SINGING NEANDERTHALS: THE ORIGINS OF
MUSIC, LANGUAGE, MIND, AND BODY”**

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ABSTRACT: This critical review is a fascinating work by Mithen on the willingness of humans to make and listen to music. Language and music are probably restricted to *Homo sapiens*, but musicality originates in our hominid ancestors and relatives. Mithen seeks explanations associated with language and music by bringing together theoretical insights from archaeology, anthropology, biology, neuroscience, and musicology to develop a sophisticated understanding of pre-modern communication systems of what currently exists. The work explains how the ability for music has evolved by addressing the evolution of language, body, and mind.

KEYWORDS: *Homo Sapiens*. Musicality. Language evolution.

RESUMO: *Esta revisão crítica é um trabalho fascinante de Mithen sobre a disposição de fazer e ouvir música dos humanos. A linguagem e a música são provavelmente restritas ao Homo sapiens, mas a musicalidade tem origem em nossos ancestrais e parentes hominídeos. Mithen busca explicações associadas a linguagem e a música reunindo subsídios teóricos da arqueologia, antropologia, biologia, neurociências e musicologia para desenvolver uma compreensão sofisticada dos sistemas de comunicação pré-modernos do que atualmente existe. A obra explica como a capacidade para a música evoluiu ao longo do tempo abordando a evolução da linguagem, do corpo e da mente.*

PALAVRAS-CHAVES: *Homo Sapiens*. Musicalidade. Evolução da linguagem.

RESUMEN: *Esta revisión crítica es un trabajo fascinante de Mithen sobre la voluntad de los humanos para hacer y escuchar música. Es probable que el lenguaje y la música estén restringidos al Homo sapiens, pero la musicalidad tiene su origen en nuestros antepasados y parientes homínidos. Mithen busca explicaciones asociadas con el lenguaje y la música reuniendo conocimientos teóricos de la arqueología, la antropología, la biología, la neurociencia y la musicología para desarrollar una comprensión sofisticada de los sistemas de comunicación premodernos de lo que existe actualmente. La obra explica cómo ha evolucionado la habilidad para la música a lo largo del tiempo abordando la evolución del lenguaje, el cuerpo y la mente.*

PALABRAS CLAVE: *Homo Sapiens*. Musicalidad. Evolución del lenguaje.

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We live in a society obliquely dominated and determined by the digital technology of audiovisual, instant, and remote communication, on which we depend both functionally and aesthetically. However, we often forget that "technology" has accompanied human evolution since its beginnings. The ability to conceive, develop and use artifacts that amplify the action of our gestures and senses is something that began even before the origin of our species (*Homo sapiens*). Music is also an offspring of technology. All musical instruments are technological developments of an epoch, expressing the gestural skill and cognitive competence of that period. Archaeological records of the first musical instruments date back about 35,000 years, when our evolutionary cousins, the Neanderthals, became extinct.

The book "The Singing Neanderthals: The Origins of Music, Language, Mind, and Body," by Prof. Mithen, a cognitive archeologist, deals with the origin of music and language (two unique and essentially human communications) from the perspective of archeology, natural selection, and neuroscience. He analyzes the evolutionary path evidenced by technology, even before the origin of our species, 6 million years ago, in the evolutionary bifurcation of the "Hominini" into two species: the "Hominidae" (as are the chimpanzees and the gorillas) and the "Homo" (as are we and as were the Neanderthals). This was marked by the beginning of the Paleolithic period (i.e., the chipped stone technology), the time of *Homo erectus*, extinct 300,000 years ago, from which emerged *Homo neanderthal* and us, *Homo sapiens*, currently the only descendants not yet extinct, of this evolutionary lineage. | 3

This book describes how language and music descend from the same primordial form of sound communication, which the author calls "Hmmmmm" (Holistic, Manipulative, MultiModal, Mimetic, and Musical). Archaeological analysis of the technology of the entire Neanderthal period shows little advancement, not expanding much beyond the chipped stone (used in making axes and spears), which suggests that Neanderthals, although they had brain capacity similar to ours, had brain capacity similar to ours, did not develop cognitive fluency skills arising from the compositional communication that constitutes language (which makes it possible to describe objects, actions, qualities, and to recursively compose with these sound modules, more complex and precise concepts). Neanderthals were limited to a holistic (non-compositional and emotive, as are our interjections or the spontaneous communication of adults with pre-verbal children and pets), manipulative (representing greetings, threats, commands, and requests), multimodal (accompanying gestures and exaggerated expressions) and mimetic (based on the repetition of sounds and gestures between interlocutors) form of sound

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communication. This protolanguage presents characteristics of the affective sound communication we appreciate, need, and call "music."

Neanderthals, due to the absence of language, were essentially musical, even more so than us sapiens. Mythen suggests that all Neanderthals possessed "absolute hearing" (as is the case with children in the pre-verbal stage) and were particularly emotional, since emotion is the driving force that precedes reason expressed through language. This affective content was expressed through the holistic and manipulative vocal sound communication that constituted the musical protolanguage of Neanderthals, justifying the title of this book (translating: "the singing Neanderthals").

The extinction of the Neanderthals was not, in fact, complete. There was interbreeding between Sapiens and Neanderthals, and today there are traces of these genetics, estimated to be about 2% of the human genome. Neanderthal protolanguage, the equivalent of musical sound communication, is so essential to us that there is no historical or archaeological record of any human group that does not have both language and music. However, the book distinguishes between the two indubitable, even citing cases studied by the neuroscience of individuals who lost one of these abilities but remained intact. Music is thus more than a by-product of language; it is sound communication before language, expressing the intention or affective motivation behind the action described by language. Compared to gesture, language is the equivalent of the act of coordinated and logical movement. At the same time, music would be the expressive and ineffable intention that motivated that action. This is why language and music are essential to sound communications, distinct and complementary, which will exist and continue to thrive through technological advances as long as there is still humanity.

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