

## Pinning down our ‘great leap forward’: When did ancient humans start to act behaviorally modern?

Based on fossil and DNA evidence, people that looked like us (anatomically modern) appeared in Africa about [300,000 years ago](#). But the archaeological record of tools and artifacts suggests they only [started to act like us](#) (behaviorally modern) 50,000 to 60,000 years ago, after thousands of generations of stasis.

This abrupt shift is sometimes called the “great leap forward”

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If we compare ourselves with pre-leap humans, then, we find vast differences. Take the development of the concept of symbolism, for example: The [use of objects, images, and signs to represent ideas](#), is a huge part of what makes us, us. It’s the key that unlocked language, along with cultural, religious, and technological innovation.

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What drove this unprecedented, world-girdling success? “It was not their technology alone,” as cognitive archaeologists Frederick L. Coolidge and Thomas Wynn write in *The Rise of Homo Sapiens*. “It was something about their minds, an ability they possessed that their cousins did not.”

That “something,” in their view, is [executive function](#): A set of complex mental processes that, among other things, enable us to achieve our goals by planning ahead, focusing our attention, reasoning abstractly and exercising self-control. The neuropsychologist Muriel Lezak has called it “the heart of all socially useful, personally enhancing, constructive, and creative abilities.”

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