

Part of the curriculum: Human evolution

Homo naledi: new species of ancient human discovered, claim scientists

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Homo naledi - reconstitution

Bones found in a South African cave are *Homo naledi*, a new species of ancient human relative, say researchers, but some experts are sceptical of the find.

Explorers discovered the bones after squeezing through a fissure high in the rear wall of the Rising Star cave, 50 km from Johannesburg, before descending a long, narrow chute to the chamber floor 40 metres beneath the surface. They recovered more than 1,500 pieces of bone belonging to at least 15 individuals: infants, juveniles and one very old adult.

Measurements of the bones show that the creature has a curious blend* of ancient ape and modern human-like features. Its brain is tiny, the size of a gorilla's. Its teeth are small and simple. The thorax is primitive and ape-like, but its hands are more modern, their shape well-suited to making basic tools. The feet and ankles are built for walking upright, but its fingers are curved, a feature seen in apes that spend much of their time in trees.

Because the remains were not encased in rock, Berger's team has not been able to date them. John Hawks, a researcher on the team, said that despite some of its modern features, *Homo naledi* probably belonged at the origins of our genus, *Homo*. "If they are as old as two million years, then they might be early South African versions of *Homo erectus*, a species already known from that region. If much more recent, they could be a relic species that persisted in isolation" said William Jungers, an anthropologist at Stony Brook School of Medicine in New York.

The Dinaledi chamber is extremely hard to access today, raising the question of how the creatures came to be there. Chris Stringer, head of human origins at the Natural History Museum in London, said that if we're talking about intentional disposal, we're talking about creatures with a brain the size of a gorilla's going deep into a cave, into the dark, and posting bodies through a small fissure into this cave chamber. It's remarkably complex behaviour for what we'd think of as a very primitive human-like species. Whether there are other explanations remains to be seen, but it's one of the plausible explanations.

*to blend = to mix

Using the text and your knowledge, explain why this discovery is controversial and what it contributes to the understanding of human evolution.

You may use the following keywords:

Homo and ape features – behaviour – tools

(Source: <https://www.theguardian.com/science/2015/sep/10/new-species-of-ancient-human-discovered-claim-scientists>)

