

Lesson 29: What Makes Human

What makes you human? You walk upright on two legs, your hands completely free. You have a brain large enough to imagine things that do not exist, to remember the distant past, and to plan for a future you cannot see. You can speak, read, reason, create, and grieve. These traits feel ordinary only because they are all you have ever known, but in the context of life's 3.5-billion-year history, they are extraordinary, built up slowly over millions of years of evolution.

The lineage called **hominins**, which includes modern humans, our direct ancestors, and our closest evolutionary relatives, split from the lineage leading to chimpanzees about 6 to 7 million years ago. One of the very first changes was **bipedalism**, which means walking fully upright on two legs. The early hominin genus **Australopithecus**, which lived in Africa 2 to 4 million years ago, was already walking with a fully upright stride, leaving recognizably human-shaped footprints in volcanic ash. Walking on two legs freed the hands completely, and free hands could do something no other animal had done before: make things deliberately and with precision.

As the hominin **brain** grew larger over many generations, those hands made more and more sophisticated **tools**. And about 2 to 3 million years ago, the genus **Homo** appeared, the group that includes our own species, **Homo sapiens**. Early Homo species were already making stone tools, cooperating in groups, and ranging across Africa in search of food. They were not the strongest or the fastest animals in their world. They were not particularly large. But they were, increasingly, the cleverest, and that, in the end, would make all the difference.

The human lineage is not a story of one dramatic leap. It is a story of gradual accumulation, one trait building on another, one generation passing something on to the next, the biological and the cultural intertwining over millions of years into something that had never existed before in the history of life.