

## **New Insights into Human Evolution**

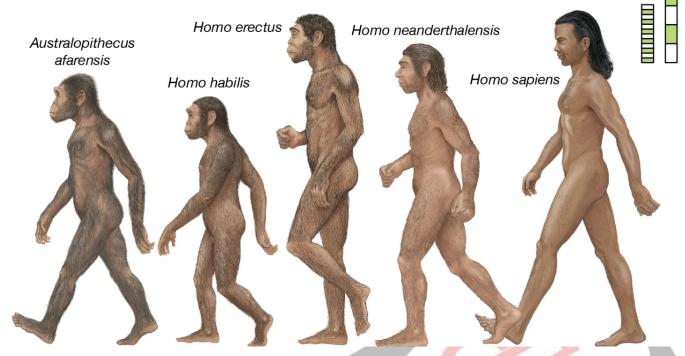
## Source: CambridgeUni

A recent study challenges the long-held belief that modern humans (*Homo sapiens*) evolved from a single ancestral population, suggesting instead that they emerged through the admixture of two distinct populations.

- The research analyzed modern human DNA to trace population splits and reunions, relying on data from the 1000 Genomes Project rather than ancient fossils.
  - The <u>1000 Genomes Project</u> is a global initiative that sequenced DNA from populations across Africa, Asia, Europe, and the Americas.

## **Key Findings:**

- Multiple Ancestry & Evolution: Modern humans (Homo sapiens) likely evolved from 2 ancestral populations, with one majority (~80%) experiencing a significant decline before recovering, while the other minority (~20%) contributed genes linked to brain function and cognition.
  - Some genes from the minority group underwent purifying selection, indicating evolutionary pressures that shaped human development.
  - This genetic exchange contributed nearly 10 times more material than the later Neanderthal-Denisovan interbreeding (~50,000 years ago), which accounts for only ~2% of non-African human DNA.
- **Genetic Mixing:** These populations diverged around **1.5 million years ago** and later interbred approximately **300,000 years ago**, forming the **genetic foundation** of modern humans.



Read More: Genome India Project, Human Evolution and Migration.

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