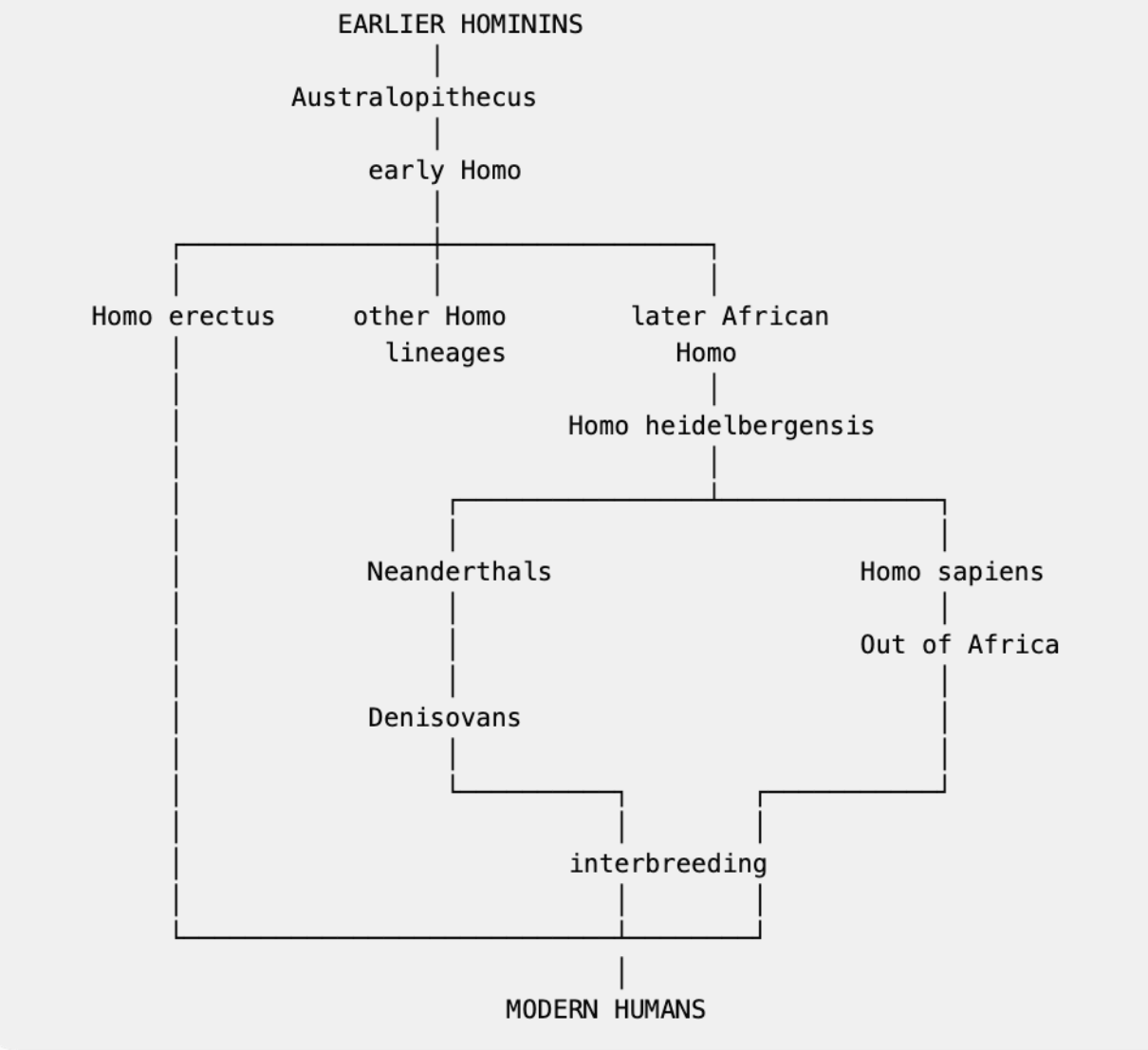
The History of the Human Species

Written by Randi Green © August 2026



The Origin Stories of Humanity

For a long time, the story of human evolution was presented as a relatively simple progression. We began somewhere in Africa. Our early ancestors gradually became more upright, their brains became larger, tools became more sophisticated, and eventually Homo Sapiens appeared. *Then we became modern humans. It is a convenient story. It is far too simple*.

The real story is far more complex. The discoveries of the last several decades have transformed our understanding of where we came from. Fossils, archaeology, genetics and increasingly sophisticated dating techniques are revealing that human evolution was not a straight line leading inevitably toward us. *It was a branching story. There were many different kinds of human groups*.

Some lived for hundreds of thousands of years. Some occupied enormous geographical areas. Others survived in isolated environments such as islands. Some had surprisingly sophisticated behaviours despite having very different anatomy from us. And some lived at exactly the same time as Homo Sapiens.

When the Homo Sapiens (the closest ancestors of modern humans) emerged in Africa approximately 300,000 years ago, we were not the only humans on Earth. BBC Earth's series Human emphasizes this extraordinary fact: *when Homo Sapiens emerged, at least six other human species were alive at the time*.

The current version of humanity is one human species among many. And that may be one of the most important things to understand about our origins.

Overview of Content

The Origin Stories of Humanity.....1
Moving Beyond the Evolutionary Ladder.....3
The Deep Beginning.....3
The Emergence of Homo.....4
Homo Heidelbergensis and the Later Human World.....4
The Neanderthals.....5
The Denisovans.....5
Homo Naledi: A Human That Should Not Have Been There?.....5
Homo Floresiensis - The Hobbit.....6
Homo Luzonensis - Another Hidden Branch.....6
A World Full of Human Groups.....7
The Disappearance of the Other Humans.....7
We Are the Last Human Species.....8
The Human Story Is Still Being Written.....8
From Many Humans to One.....9

Moving Beyond the Evolutionary Ladder

The traditional image of human evolution looks something like a ladder:

Ape → primitive human → Homo erectus → Neanderthal → modern human.

This image is misleading.

Modern humans did not descend from modern chimpanzees, and Neanderthals were not simply an earlier, more primitive version of us. Humans and other living apes share common ancestors, while the human family itself is subsequently divided into numerous different branches.

The Smithsonian Institution currently lists more than a dozen recognized early human species, while also emphasizing that the exact number of species remains debated. The picture is therefore better imagined as a tree, or perhaps even as a dense evolutionary bush.

- Branches formed.
- Populations separated.
- Some migrated.
- Some became isolated.
- Some disappeared.
- Some encountered one another again.
- And occasionally, they interbred.

This means that human evolution was not simply a process of replacement. It was also a process of interaction.

The Deep Beginning

The story reaches back millions of years before Homo sapiens appeared. Early members of the human evolutionary family included species such as Australopithecus (dubbed so due to the Australian archaeologist that found the first skull in Africa). These were not yet members of our genus, Homo, but they represent important stages in the evolutionary history leading toward later humans.

Australopithecus Afarensis, for example, lived in East Africa roughly 3.9–2.9 million years ago. The famous fossil known as Lucy belongs to this species. Australopithecus had a

mixture of characteristics. It retained many features associated with earlier primates while also possessing adaptations for habitual upright walking.

This is important because human evolution did not begin with the appearance of a recognizably modern human. It began with a very long sequence of anatomical and behavioural changes.

Over millions of years, different populations experimented, in evolutionary terms, with different solutions to the challenges of survival.

- Some became better adapted to walking long distances.
- Some developed larger brains.
- Some became highly successful in particular environments.
- Some developed combinations of characteristics that would later disappear entirely.

The Emergence of Homo

Eventually the genus Homo appeared. Among the early members were Homo Habilis and Homo Erectus. *Homo Habilis* is associated with some of the earliest members of our genus and with early stone-tool traditions. Its exact place in the family tree remains debated.

Homo Erectus, however, represents one of the great expansions in human evolutionary history. This species appeared roughly 1.9 million years ago and spread far beyond Africa. Its anatomy was much more similar to later humans, including relatively long legs and a body adapted for efficient long-distance movement.

Homo Erectus demonstrates something crucial: *Human migration did not begin with Homo sapiens*.

Earlier human populations had already begun moving beyond Africa hundreds of thousands of years before our species appeared. The human family was already becoming geographically diverse.

Homo Heidelbergensis and the Later Human World

Another important population is Homo Heidelbergensis, which lived roughly between 700,000 and 200,000 years ago.

Its classification is complicated, and scientists continue to debate precisely how different fossils should be grouped. But it is important because populations commonly associated with Homo Heidelbergensis appear close to the evolutionary history of both Neanderthals and modern humans. From this point onward, the human story becomes increasingly

recognizable. Different populations were developing in Africa and Eurasia. And eventually, several distinct human lineages existed simultaneously.

The Neanderthals

Perhaps no extinct human species is more familiar to us than Homo Neanderthalensis. But the old image of the Neanderthal as a primitive, brutish human has largely disappeared.

Neanderthals were highly successful humans who lived across Europe and parts of Asia for hundreds of thousands of years. They survived Ice Age environments, hunted, manufactured tools, controlled fire and lived within social groups. They were also not completely separate from the Homo Sapiens groups.

When Homo Sapiens expanded into Eurasia, our ancestors encountered Neanderthals. And the interaction was not simply competition. *There was interbreeding*. This means that Neanderthals did not simply disappear without leaving a trace. A portion of their genetic heritage survives in many people alive today.

The relationship between Homo Sapiens and Neanderthals is therefore much more complicated than the idea that one species simply replaced another. BBC Earth's Human specifically explores the disappearance of the Neanderthals and the possible role Homo sapiens played in their eventual decline.

The Denisovans

The Denisovans make the human story even more interesting. Unlike Neanderthals, who are represented by a relatively substantial fossil record, Denisovans were initially identified largely through ancient DNA recovered from remains found in *Denisova Cave in Siberia*.

Genetic evidence revealed a previously unknown human population. Denisovans were closely related to Neanderthals, but genetically distinct. And, once again, they interacted with Homo Sapiens. Some populations living today carry Denisovan genetic ancestry, particularly in parts of Asia and Oceania.

This changes the way we should think about extinction: *A human lineage can disappear as a distinct population while portions of its genetic heritage continue inside another population*.

In that sense, extinction does not always mean complete disappearance. Sometimes a lineage becomes absorbed.

Homo Naledi: A Human That Should Not Have Been There?

Homo Naledi is one of the most intriguing discoveries of recent human evolution. The fossils were discovered in South Africa and subsequently dated to approximately 335,000–236,000 years ago. That date is remarkable. Homo Sapiens was already emerging during this broad period. Yet Homo Naledi possessed a strange mixture of characteristics. Some aspects of its anatomy appear relatively primitive, while others resemble later members of Homo. Its evolutionary position remains unresolved.

The Smithsonian notes that Homo Naledi combines Australopithecus-like characteristics with Homo-like features, and that scientists are still working to determine exactly where it belongs on the human evolutionary tree. This is another reminder that evolutionary change does not happen uniformly.

A species can retain ancient characteristics while simultaneously developing other characteristics that appear much later elsewhere. Evolution does not necessarily move as a single package.

Homo Floresiensis - The Hobbit

Then there is Homo Floresiensis. This extraordinary human species lived on *the Indonesian island of Flores*. Its remains reveal a very small-bodied human, approximately one metre tall in some individuals, with a remarkably small brain compared with Homo sapiens. Yet the species made and used stone tools and appears to have hunted animals on its island environment. The species survived until approximately 50,000 years ago.

That means that while Homo Sapiens was already spreading through the world, another completely different human species was living on an island in Southeast Asia. Homo Floresiensis demonstrates that there was no single evolutionary formula for being human.

Large brains and large bodies were not the only possible solutions. Isolation can produce radically different evolutionary outcomes.

And the origin of Homo Floresiensis remains unresolved. Scientists continue to investigate whether it evolved from Homo erectus, from an even earlier human population, or from another branch of the Homo family.

Homo Luzonensis - Another Hidden Branch

The discovery of Homo Luzonensis on *the Philippine island of Luzon* added another unexpected branch to the human story. The remains include teeth and bones from several individuals and have been dated to approximately 67,000 years ago.

Like Homo Floresiensis, this species appears to have developed in an island environment.

And again, its exact evolutionary origin is uncertain. What makes the discovery particularly significant is that it demonstrates that Southeast Asia contained multiple unusual human populations at roughly the same time. Homo Sapiens was not entering an empty world.

This genetic group was entering a world already inhabited by other human groups.

A World Full of Human Groups

This is perhaps the most important shift in our understanding. Around 70,000 years ago, *different human groups* were still living on Earth:

- Homo Sapiens,
- Neanderthals,
- Denisovan-related populations
- The island humans Homo Floresiensis and
- Homo Luzonensis, with the precise composition depending on how populations and species are classified.

The Smithsonian notes that at least four recognized human species were present around this period. Our planet was not inhabited by one group of humans.

It was inhabited by several. Different human populations had different bodies, different adaptations, different environments and different evolutionary histories.

- Some lived in forests.
- Some occupied open landscapes.
- Some adapted to extreme cold.
- Some crossed into isolated islands.
- Some became highly specialized.
- And some encountered one another.

This means that the world into which Homo Sapiens expanded was already a human world.

The Disappearance of the Other Humans

Why are the Homo Sapiens the only surviving human species? This remains one of the great questions of human evolution. The answer is unlikely to be a single event.

Climate change, competition, population size, disease, technological differences, ecological disruption, demographic changes and interactions between populations may all have contributed.

- In some places, Homo sapiens may have outcompeted other populations.
- In others, populations may have been absorbed through interbreeding.
- Some may simply have been unable to survive environmental changes.
- And in some cases, we still do not know.

The important point is that the disappearance of other humans happened relatively recently in evolutionary terms. The modern human world is therefore the survivor of a much more diverse human past.

We Are the Last Human Species

Today there is only one surviving species of human: Homo Sapiens.

That can make our existence appear inevitable. It was not. For most of human evolutionary history, Homo sapiens did not exist. And for a substantial period after our emergence, we were not alone. We were one branch among many. The fact that we are now the only surviving branch can create the illusion that evolution was always moving toward us.

But evolution does not work toward a predetermined destination. There was no evolutionary guarantee that Homo sapiens would become the dominant human species. Our survival was the outcome of a particular combination of biological, environmental, geographical, social and historical circumstances. We are here because our lineage continued. Others did not.

The Human Story Is Still Being Written

Perhaps the most fascinating aspect of human origins is that the story is not finished.

- Every new fossil can alter the family tree.
- Every ancient-DNA discovery can reveal previously unknown relationships.
- Every archaeological site can change our understanding of what another human species was capable of.

The Smithsonian explicitly notes that the exact number of early human species remains debated. This means that the human family tree should not be treated as a fixed diagram. It is a working model.

Some branches are well established. Others are uncertain. Some species may eventually be merged into other populations. Other species may yet be discovered. And there are

enormous gaps in the fossil record. We know considerably more than we did even a few decades ago. But what we know has also made the story stranger.

Major human species and close relatives

Species / group	Approx. period	Where	Short explanation
Australopithecus afarensis	3.9–2.9 million years ago	East Africa	One of the famous early upright-walking hominins. "Lucy" belongs to this species. Not Homo, but an important part of the evolutionary background.
Homo habilis	~2.4–1.4 million years ago	Africa	One of the earliest members of the genus *Homo*. Associated with early stone-tool technology, although the relationship between tools and this species is debated.
Homo erectus	~1.9 million–100,000 years ago	Africa, Asia, possibly Europe	One of the great evolutionary success stories. Had a body much closer to ours and was among the earliest humans to expand far beyond Africa.
Homo heidelbergensis	~700,000–200,000 years ago	Africa, Europe	Often regarded as close to the common ancestral population from which Neanderthals and modern humans developed, although its exact classification is debated.
Neanderthals — Homo neanderthalensis	~400,000–40,000 years ago	Europe & western/central Asia	Highly sophisticated humans adapted to Ice Age Eurasia. Used tools, controlled fire, hunted large animals, cared for injured individuals and had complex social lives. They interbred with *Homo sapiens*.
Denisovans	At least ~200,000–50,000 years ago	Asia	Known primarily through DNA and a relatively small fossil record. They were a distinct archaic human population closely related to Neanderthals and interbred with modern humans.
Homo naledi	~335,000–236,000 years ago	Southern Africa	A remarkably unusual human species with a mixture of primitive and surprisingly modern-looking characteristics. It existed at roughly the same time as early *Homo sapiens*.
Homo floresiensis	~100,000–50,000 years ago	Flores, Indonesia	The famous "hobbit." Very small-bodied, but apparently capable of making sophisticated stone tools. Its evolutionary origin remains fascinating and debated.
Homo luzonensis	At least ~67,000 years ago	Luzon, Philippines	Known from a small collection of teeth and bones. Shows that Southeast Asia contained several unusual human lineages.
Homo sapiens	~300,000 years ago–present	Originated in Africa; now worldwide	Our species. Initially one of several human species, eventually becoming the only surviving Homo lineage.

From Many Humans to One

The great mystery is therefore not simply: "*Where did Homo Sapiens come from?*"

There is another, perhaps more profound question: "*How did Homo Sapiens become the last human species?*"

That is the story BBC Earth's Human sets out to explore across approximately 300,000 years of human evolution.

- We began as one population among several.
- We encountered other humans.
- We migrated into their territories.
- We competed.
- We cooperated.
- We interbred.

- We absorbed some of their genetic heritage.

And eventually, the other human lineages disappeared as distinct populations.

But beneath the biology of the modern human lies a much older and much more complicated history. We carry traces of extinct human populations within our genomes. We inhabit landscapes once occupied by other humans. We use technologies that emerged from an extraordinarily long sequence of experimentation. And we have inherited a world shaped not by one human lineage, but by many.

The human story, therefore, is not a story of one species gradually becoming more advanced. It is the story of a family. A very large family. A family of branches, experiments, migrations, encounters, disappearances and survivals. And Homo Sapiens is simply the branch that remains.

For now.