



Mysteries of Human Evolution

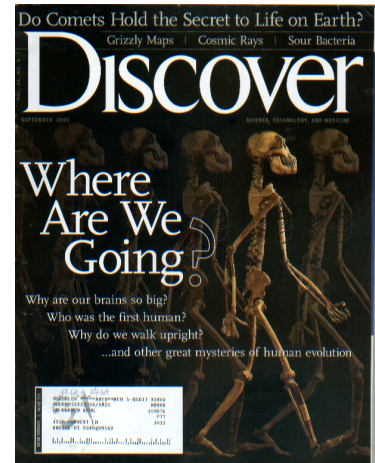
Review by Warren Krug (January-April, 2004)

A review of an article in the September, 2003 issue of Discover magazine. The dates mentioned are as stated in the article.

“**W**hat we don’t know about our evolution vastly outweighs what we do know. Age-old questions defy a full accounting, and new discoveries introduce new questions.” So writes Carl Zimmer in introducing his September, 2003 Discover article titled “Great Mysteries of Human Evolution.”

One must compliment the magazine publisher and author for their honesty even though Zimmer doesn’t appear in any way to be questioning the “fact” of evolution. Still, it is very surprising that with all these uncertainties about human evolution, they don’t consider the possibility the problem may lie with the theory itself and not just the details.

Zimmer presents his topic in the form of eight questions which he then proceeds to answer as best he can. The questions are: who was the first hominid?; why do we walk upright?; why are our brains so big?; how did we first use tools?; how did we get modern minds?; why did we outlive our relatives?; what genes make us human; and have we stopped evolving?



Who was the first hominid?

The author imagines going back in time about 7 million years to some African lake and being able to observe the first hominids (members of the human family). These primates may look something like chimpanzees but they have flatter faces and different body proportions. They have just recently split off from other apes and have started down the road to becoming modern humans.

The author notes a problem with this scenario. If these earliest hominids were anything like living chimps or other living apes, each species may have numbered in the hundreds of thousands or even millions. But few fossils of them have ever been found, a fact Zimmer blames on animal scavengers. He admits, “when it comes to early hominids, paleoanthropologists have to make do with a few teeth or skull fragments.” (emphasis ours)

Not long ago *Australopithecus afarensis*, age 3.6 million years, was considered the oldest hominid. More recently as many as five species older than *A. afarensis* have been found, some as old as 7 million years. “These new fossils have thrown cherished orthodoxies into question,” writes Zimmer. Some scientists now see the history of human evolution as looking more like a bush than a straight line. Although no new orthodoxy has replaced the old one, “there’s lots of debate.”

Why do we walk upright?

According to accepted evolution theory, the first major development that set the first hominids apart from other “apes” was bipedalism—the ability to stand up and walk on two legs. The long-standing idea is bipedalism came about when our ancestors left the forest for the savanna because of the need to look over the tall grass on the savannah or get to isolated stands of trees.

But why would the fragile hominids leave the safety of the forest for the dangerous savanna, asks a U. of Southern Cal primatologist? Moreover, investigations of the older hominid sites indicate they were not savannas at all, but lightly to densely wooded landscapes.

Scientists must now try to figure out not only why walking upright evolved, but how it evolved. Examinations of the famed Lucy skeleton show she may have walked much as we do. Some researchers are resorting to studying modern apes in the wild to try to get a clue as to how and why bipedalism evolved.

Why are our brains so big?

The human brain is seven times larger than what would be expected in a mammal our size. Current theory holds that millions of years ago our ancestors had brains about the size of a modern chimpanzee, but then about 2 million years ago these brains started to increase in size, in fits and starts, until reaching their present size at least 160,000 years ago.

What caused this explosion in brain size? “You don’t evolve large and expensive organs unless there’s a reason,” says a British scientist. (Comment: an interesting remark—it’s as if he believes people have within themselves the power to evolve something.)

Paleoanthropologists are divided about the reason we have large brains. Was it to be able to make better tools in order to improve the food supply in order to make more offspring possible? Was it to improve social life? (Primates living in large groups tend to have larger brains.) On the other hand, improved social life may have been the cause and bigger brains the result.

When did we first use tools?

Evolutionists see the ability to use tools as a crucial turning point in human history by allowing the early hominids to find food in places their ancestors could not. “But scientists still have hardly any clues to how that evolutionary transition took place,” writes Zimmer.

Researchers do study the ancient tools. A collection of chipped rocks in Ethiopia, dated at 2.5 million years, is thought to be the oldest tools. The tools were sharp enough to cut through animal hides and crack open animal bones. They required a brain capable of looking at an untouched rock and seeing a tool.

However, recent research is hinting that human technology may be millions of years older than those chipped rocks. Research on Lucy and her *A. afarensis* fellows, who lived a million years before the first known tools, indicates their hands were fully capable of making and using tools. Even chimpanzees are able to make simple tools such as sandals fashioned out of leaves. Yet, “many researchers think there’s not enough evidence to say anything definitive about the evolution of tool use,” concludes Zimmer.

How did we get modern minds?

Mainstream scientists do not believe that the earliest hominids, even those who used tools, had the kind of brain that modern humans possess. For example, a supposed human ancestor called *H. ergaster*, according to the author, was too dumb to conceive of putting a stone axe on the end of a stick to make himself a better hunter. Scientists don’t yet know how that modern mind came into existence. They can’t get into the brains of any of our imagined ancestors and can only infer what these early hominid minds were like by looking at the things the hominids made.

However, generally the artifacts that have been discovered—pictures of mammoths and woolly rhinos, jewelry, elaborate graves, and tools—indicate that those who made them had minds much like our own. Their bones also look like ours.

One controversial theory, put forth by Richard Klein, a Stanford University paleoanthropologist, holds that the modern mind is the result of a rapid genetic change around 50,000 years ago, but other scientists have dated artifacts produced by a modern mind to be much older, as much as 250,000 years old. Scientists await “a resolution to this debate.”

Why did we outlive our relatives?

Zimmer claims that modern humans can trace their ancestry back to the *Homo sapiens* species living in Africa 150,000 years ago. Yet he says there were two other hominid species at that time—*Homo neanderthalensis* (Neanderthals) in Europe and *Homo erectus* in Asia. So why did *H. sapiens* survive while the other two species disappeared?

Scientists admit they have little information about what happened when *H. sapiens* encountered the other two groups. “We don’t know what...is going on there,” Klein says. “We need more fossils with good dates.”

Attempts to explain the disappearance of the Neanderthals and *H. erectus* have included everything from warfare to exotic viruses, but other explanations have centered around possible advantages that early humans possessed—better tools, more trade, more children, or even better clothing. But no one knows for sure.

What genes make us human?

When the human genome, now completely sequenced, is compared to the chimpanzee genome, geneticists tell us that the codes, at least as far as the structure of proteins is concerned, are 99.4% identical.

So why is it that there is such a big difference between the two species? Chimps don’t get AIDS, Alzheimer’s, and other diseases that plague humans. Humans are bipedal, have language and much larger brains. Scientists are studying the .6% difference to find answers.

Researchers believe that perhaps several thousand human genes have changed since the emergence of hominids. But “those genes can only build a modern human being by cooperating with one another rather than working alone.”

“We look for simple answers, but we almost always find a mess,” says a geneticist at the U. of Wisconsin.

Have we stopped evolving?

According to evolution dogma, it has been 7 million years since some diminutive apes began evolving into what is presently the planet’s dominant species, us. We’ve much more powerful brains than those of any other species.

So why don’t we continue to evolve even larger and more powerful brains, like some advanced cultures seen on *Star Trek*, Zimmer wonders? “But scientists can’t say where we’re headed. It’s possible that we’ve reached an evolutionary dead end.”

Zimmer supposes that since larger brains means more and more wiring, our brains may be reaching their computational limit. Another clever answer to this problem lies in the size of a mother's birth canal. Zimmer says it can't increase much more (to allow for the birth of babies with bigger heads) or the mother wouldn't be able to walk. Therefore, our brains apparently are smart enough to know not to become any larger.

Zimmer quotes a scientist as saying we don't know where we're going. "It's too much of a lottery."

For creationists, the confusion surrounding the notion of human evolution is predictable. The reviewed article is simply an attempt to scientifically make sense out of science fiction.

This situation might be compared to a house for sale in which the foundation is crumbling, the windows are broken, some of the doors are off their hinges, the sinks and toilets are leaking, and there is no furnace in the building. Yet, the realtor insists the house as a whole is in fine shape.

If present trends continue, the emergence of the human race will get pushed farther and farther back toward the beginning of time, and the earliest humans will still be seen as pretty much like modern ones. Isn't it beginning to sound more and more like the book of Genesis? *LSI*