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About the Author

Dr. Daniel A. Biddle is president of Genesis Apologetics, Inc., a 501(c)(3) organization dedicated to equipping Christians with Biblical answers for evolutionary teaching in public schools. Daniel has trained thousands of students in Biblical Creation and evolution and is the author of several Creation books, videos, and other publications. Daniel's experience and qualifications include a Ph.D. and B.S. in the Behavioral Sciences from Alliant University and the University of San Francisco, respectively. Daniel maintains an executive role in two HR consulting firms where he has provided expert consulting and/or witness testimony in over 100 state/federal cases in the areas of research methodologies and analysis.

About the Ministry

Genesis Apologetics is a non-profit 501(c)(3) ministry that provides Christians with Biblically and scientifically accurate answers to the evolutionary theory that public schools propagate. Our doctrinal position on Biblical Creation aligns with Answers in Genesis and the Institute for Creation Research (ICR), which take Genesis at face value, including its testimony of a miraculous creation and Flood that occurred thousands, not millions, of years ago. Genesis Apologetics offers the following free online training resources:

- **Genesis Impact feature film and supporting videos:**
www.genesisimpact.com
- **Mobile App:** Search *Genesis Apologetics* in App stores.
- 5th – 10th Grade Students: *www.debunkevolution.com*
- 11th Grade – College: *www.sevenmyths.com*
- YouTube Channel (**Genesis Apologetics**).
- Website: *www.genesisapologetics.com*

Introduction

This book is designed to compliment the *Genesis Impact* movie (see: www.genesisimpact.com) and the 13 supporting videos that dive deeper into the topics covered by the movie. Why are these resources important? They are *crucial* because millions of people visit natural history museums around the U.S. every year which display ideas about how we view the world. Did humans come from a long line of random evolution as these museums suggest? If we did, what's our purpose in life? Where does our sense of morality come from? If the Bible is true—and we believe it is—a very different story shapes our lives, answering questions like where we came from, why we're here, who sets the morality that governs our lives, and what happens in the afterlife.

These museums present where they are presented with the idea of evolution over millions of years, but both of these ideas have failed to validate to either reality or **observational** science—the real kind of science that we use to put people on the moon and create new scientific advancements like technology and medicine. In fact, over the last 4,000 to 5,000 years of recorded history, no one has ever observed evolution produce a new kind of creature. Animals continue to reproduce after their own kinds, just as prescribed in the Bible, and experiments designed to prove molecules-to-man evolution have failed to even reproduce the first step of creating complex life from nothing—even when the conditions are rigged for the best possible outcome.¹

These museums are soaked with the idea of deep time—which is central to the theory of evolution—but numerous attempts to validate the theoretical ages of rocks against the known, observed ages of rocks have failed, producing discrepancies of millions of years. But do most Christians know about these obvious limitations that undermine evolution as promoted in these museums? Are Christians having their faith shaken by going through these museums because they present

such a stark contrast from the Biblical account of origins? The Flood? Dinosaurs? Most don't even know about the assumptions upon which these evolutionary ideas are based. Even fewer know the specific fatal flaws that completely dismantle these ideas.

Join us now on a tour while we carefully review the 12 primary evolutionary viewpoints presented in these museums: the Human-Chimp 98% Similarity Myth, key ape-to-human icons like *Ardipithecus ramidus*, “Lucy” the *Australopithecus*, *Homo habilis*, and Neanderthals, Darwin's finches, the fossil record and transitional forms, continental drift and Pangea, dinosaur extinction, whale evolution, deep time based on radiometric dating, and historical vs. observational science.

How to Be Effective in Creation Apologetics

Apologetics refers to defending the faith, not apologizing. The word comes from 1 Peter 3:15, “always be ready to give a defense [απολογία (apologia), or answer]...” We offer eight *key strategies* for creation apologetics. By the Holy Spirit's power, God can use these to turn people from confusion and open their eyes to the truth of the Gospel and the Creation account upon which it is based (see 2 Timothy 2:14–26 and 2 Timothy 3:17).

1. **Be grounded.** God's Word is true, period. Yes, there are things we don't fully understand in God's Word and things we don't understand about the natural world. However, we should not fall into “Scripture spinning” traps that try to fit man's changing ideas into the Bible. For example, some try to insert millions of years into the Genesis genealogies, or to stretch the creation days into vast periods. Many Scripture passages affirm this strategy of understanding and applying the Bible's plain meaning, just as written (e.g., 2 Peter 3:16, 1 Timothy 6:20, Colossians 2:8, and Jeremiah 23:36).

2. **Prepare.** Two key steps help us prepare. First, we *watch* our motivation. If love does not motivate us, then we are off track. Love is a decision to act on another's behalf regardless of how you feel. Love keeps our pride in check. Love often directs us to wait before someone is ready to hear certain ideas. Jesus didn't share everything with His disciples all at once. He loved them by revealing just what they needed to hear at just the right time. Remember, most people have been *soaked* in the lies of the world. It takes time to unlearn years of secular "training." Second, *study* the Bible. Second Timothy 2:15 advises, "Be diligent to present yourself approved to God, a worker who does not need to be ashamed, rightly dividing the word of truth" and 2 Timothy 4:2 states, "Preach the word! Be ready in season and out of season. Convince, rebuke, exhort, with all longsuffering and teaching."
3. **Be aware.** There are three things to be aware of when doing outreach to the unsaved community. First, their minds are hostile towards God (oftentimes both knowingly and unknowingly) and thus they are hindered from seeing the truth about Creation and Salvation: "But the natural man does not receive the things of the Spirit of God, for they are foolishness to him; nor can he know them, because they are spiritually discerned" (1 Corinthians 2:14). Second, while they internally know about God because God has revealed himself through Creation, their thoughts have turned futile and their hearts hardened because they block out the obvious truth that He exists (Romans 1:21–23). Third, they have become *willingly ignorant* of Creation and the Flood according to 2 Peter 3:3–6. This causes them to teach and reinforce long ages and uniformitarianism (the idea that present processes and rates are the key to understanding the past, without global catastrophes such as the Flood), showing a strong bias against miracles. Sadly, many Christians today also live without a full

understanding of just how true and accurate the Genesis Creation and Flood records are. This compromise takes its toll on confidence in Scripture and in God's greatness.

4. **Be filled and led by the Holy Spirit.** Scripture tells us that we should be continually filled with the Holy Spirit (John 15:1–11, Galatians 5:16–25). This simply means deciding to think and do what God wants us to think and do, based on what the Bible says we should think and can do in Christ. Scripture clarifies that we can *quench* or *grieve* the Holy Spirit (1 Thessalonians 5:19, Ephesians 4:30). Ephesians 4–5 lists several actions that can do this, such as “living like the pagans” (4:17–19), lying (4:25), being angry (4:26–27), stealing (4:28), cursing (4:29), being bitter (4:31), unforgiving (4:32), and being sexually immoral (5:3–5). If certain actions can grieve the Spirit, other actions can equip believers to be filled with the Holy Spirit. Prayer, Bible study, fellowship, and worship all help. But the decision to live God's way lies at the core of walking in the Spirit. Ephesians 2:10 states that we are “His workmanship, created in Christ Jesus for good works, which God prepared beforehand that we should walk in them.” To walk in these works, we need to pay attention to His living Word. We also need to be mindful of the Spirit's prompting towards certain activities. God's Word is full of examples that support “being led” by the Spirit (e.g., Acts 8:29, 13:2, 15:28, Romans 8:14, and Galatians 5:25).
5. **Show wisdom.** Our ministry has responded to thousands of inquiries and comments from people across a wide spectrum of views. It would be quite easy to categorize all these inquiries into two groups: (1) people who are not genuinely interested in finding an answer; and (2) those who genuinely seek answers and have humble hearts to listen. The first group just wants to throw up an objection to the Christian faith so they don't have to

consider it or they want to make Christians doubt. The second group is willing to consider Christian teaching. Spend more time with this second group. If they are open, *pour* into them. If not, move on quickly. The seeds fall on all kinds of soil, and good farmers invest their time wisely by watering hearts that yearn for Truth.

6. **Focus.** Our ministry surveyed a broad cross-section of nearly 300 young people, ages 14 to 24, asking an open-ended question: “Regardless of whether you believe in evolution, what is the best evidence that evolution is true?” Respondents gave varied answers, but we were able to sort them into ten categories. We found that just four categories make up 72% of the reasons for belief in evolution: (1) arguments pertaining to human evolution (25%); Darwin’s theory proper (mutations, natural selection, etc.) (21%); fossils and so-called transitions (15%); and the apparent consensus of scientists and science regarding the theory of evolution (11%).² When deconstructing the lie of evolution in presentations, we focus on these four areas. Be stingy about spending time on esoteric, splintered questions.
7. **Know when and how to retreat.** When you don’t know the answer to a question, say you don’t know! Even when we know nothing, we can always ask them to give a reason for the statements they make. Asking questions about their views encourages deeper thinking about the important issues. It might even reveal that their beliefs do not have good reasons behind them. Try to ask a question to get them thinking about what they believe and why. If they don’t interact on that level, then retreat with as much grace as possible. You always have time to go back and find answers to their questions!
8. **Spend more time studying the truth than learning about counterfeits.** Several great websites showcase solid biblical and scientific resources (see the **Helpful Resources** section in the back).

Humans and Chimps Share 98% of their DNA?

Suggested Videos:

www.genesisapologetics.com/chimpdna

Overview

The idea that human and chimp DNA overlap by 98 to 99 percent has been widely used to promote the idea that humans and chimps shared a common ancestor millions of years ago.³ But have you considered how they came up with this estimate?

For starters, let's look at the size of each genome. While estimates of the exact size of our genome has varied over the years, the last count has it at 3.097 billion base pairs. But the chimp genome is larger, at 3.231 billion. This means that chimps have at least 134 million more base pairs than we have. That makes their genome at least 4.3% larger than ours.⁴ So how is it possible that our DNA is 98% similar to theirs, when the chimp genome is actually 4.3% *larger* than ours? Right out of the gate you can see there's something wrong with the sweeping 98% estimate that's frequently used. They came up with this figure by **cherry picking** only the sections of our DNA that overlapped with theirs.⁵

Let's see how *MinuteEarth*, a secular training site that holds to an evolutionary perspective, describes it:

When researchers sat down to compare the chimp and human genomes, those single-letter differences were easy to tally. But the big mismatched sections weren't. For example, if a genetic paragraph—thousands of letters long—appears twice in a human scroll, but only once in its chimp counterpart, should the second copy

count as thousands of changes, or just one? And what about identical paragraphs that appear in both genomes, but in different places, or in reverse order, or broken up into pieces? Rather than monkey around with these difficult questions, the researchers simply excluded all the large mismatched sections—a whopping 1.3 billion letters of DNA—and performed a letter-by-letter comparison on the remaining 2.4 billion, which turned out to be 98.77% identical. So, yes, we share 99% of our DNA with chimps—if we ignore 18 percent of their genome and 25 percent of ours.⁶

Wow—ignoring 18% of the chimp genome and 25% of the human genome—that’s a lot to ignore! In fact, this represents hundreds of millions of DNA letters in each side of the comparison! Could the sections they left out be responsible for coding most of the obvious differences we see between humans and chimps? They continue:

And there’s another problem: just as a small tweak to a sentence can alter its meaning entirely or not at all, a few mutations in DNA sometimes produce big changes in a creature’s looks or behavior, whereas other times lots of mutations make very little difference. So just counting up the number of genetic changes doesn’t really tell us that much about how similar or different two creatures are.

It certainly makes sense that “just counting up the number of genetic changes doesn’t really tell us that much about how similar or different two creatures are.” Indeed, human DNA and gene-level comparisons are frequently made to other mammals, such as mice, cows, and even dogs with high

levels of overlap, and we are obviously quite different from these animals.

The high degree of similarity is because the human body has many molecular similarities to other living things. After all, they all use the same basic molecules. They share the same water, oxygen, and food sources. Their metabolism and therefore their genetic makeup resemble one another to occupy the same world. However, these similarities do not mean they evolved from a common ancestor any more than all buildings constructed using brick, iron, cement, glass, etc. means that they share origins.

DNA contains much of the information necessary for an organism to develop. If two organisms look similar, we would expect DNA similarity between them. The DNA of a cow and a whale should be more alike than the DNA of a cow and a bacterium. Likewise, humans and apes have many body similarities like bones, hair, and the ability to produce milk, so we would expect DNA sequences to match that. Of all known animals, the great apes are most like humans, so we would expect that their DNA would be most like human DNA.⁷

This is not always the case, though. Some comparisons between human genes and that of other animals in the literature are very interesting. Cats have 90% homologous genes with humans, dogs 82%, cows 80%,⁸ chimpanzees 79%, rats 69%, and mice 67%.⁹ Other comparisons include both fruit fly (*Drosophila*) and chickens with about 60%¹⁰ of genes corresponding to a similar human gene.¹¹ These estimates suffer from the same problems that human-chimp comparisons do, but they illustrate the patterns of similarity that one would expect from a single divine designer.

Based on new data in 2018, researchers have now shown that the maximum human and chimp DNA similarity is actually only 84%, but this figure didn't include the areas of human and chimp DNA that could not be matched up because they were so different, so the actual estimate is much lower.¹² This brings us from 98% to 84% maximum similarity between the comparable regions. Using the corrected 84% figure, plus the fact that their

genome is over 4% larger than ours, shows there are **far too many genetic changes to go from chimp to human in the last six million years at the rate their theory proposes.**

This is really the crux of the matter.¹³ Let's even assume for a minute that the DNA gap between chimps and humans is in fact only 1%. This would still represent over 30 million DNA letter differences between chimps and humans. Can random DNA mutations really produce 30 million meaningful changes to go from chimps to humans within the supposed 6 million-year timeframe? Secular scientists have **closed the door** on this possibility, even with conclusions drawn from evolution-based publications.

For example, population geneticist, Michael Lynch stated in the *Journal of Molecular Biology and Evolution*: "A central problem in the evolutionary theory concerns the mechanisms by which adaptations requiring multiple mutations emerge in natural populations."¹⁴ Lynch calculated that it would take over **200 million years** for just **two** specific mutations to become established in a pre-human population. That's over **33 times longer** than the supposed 6 million years to develop just two mutations! So, under the evolutionary model, if it takes 200 million years to produce just **two** mutations, how long would it take to produce 30 million (based on the 1% difference)? Or how about 300 to 400 million (based on the 16% difference figure)? Do you see how absurd this is?

Even though genetic researchers estimate there are about 100 new mutations per person, per generation¹⁵ most mutations have a near-neutral effect, and are furthermore slightly deleterious.¹⁶ Deleterious mutations randomly occur anywhere in the genome, so creating damage is easy. However, genetic changes that produce **improvements** are analogous to inserting just the right computer code into just the right place in a computer program for a specific benefit to emerge. It's next to impossible. Not only does a specific letter need to mutate, it needs to fall into the genetic ladder at a **specific location** to actually result in some type of benefit. When it comes to how frequently these types of mutations occur compared to the

evolutionary timescales, there's just not enough time for it to happen. If it takes 200 million years for just two to emerge, and at least 300 to 400 million are needed to move from ape-like-creatures to human, one quickly understand that evolution from apes to humans is **utterly impossible**.

Evolutionary geneticists from Cornell University have confirmed the scientific impossibility of this ape-to-human idea in a study published in the *Annals of Applied Probability* which revealed the average waiting time to form a slightly longer DNA sequence of **only eight** specific mutations is about 650 million years.¹⁷ This estimate gets 100 times longer after accounting for genetic drift, increasing the time to about 65 billion years, which is four times longer than the supposed 13.7 billion years ago that evolutionists believe the universe began. Now it's impossible again. There is simply no way to go from ape-like-ancestors to humans.

The fact is, the human and chimp genomes code for two completely different creatures. While both are mammals based on scientific criteria, God made man in His image and gave him a soul that is eternal. Human and chimp genomes code for two completely different things: Chimps, which are soul-less tree-dwelling animals; and humans, which are eternal souls wrapped in bodies that have vastly different capabilities than **all** animals because we were created in God's image and charged to be caretakers over Creation—including chimps! Being made in the image of God and charged with taking care over God's Creation would mean that humans would have several distinctions from chimps. Let's take a look at just some of them.

First, humans are the only living thing on the planet that has a **conscience** and a **sense of morality**. Our conscience lets us know when we've failed or when we might fail to abide by either governmental laws or God's laws. Primates know nothing of laws. They live only by instincts and very limited group "norms."

Next, humans can **speak**. For example, the English language contains over 1 million words, and we can speak all of them, plus we can even learn or invent totally different

languages. Apes cannot speak any of them. They do not even have a speech “program” installed in their brains. The parts of the human brain responsible for handling speech, called the Brodmann areas 44 and 45, are over six times larger in humans compared to chimps.¹⁸

Speaking of **brains**, ours are 400% larger than chimps. We’re also much smarter—having an average IQ of 100, when chimps can’t even take the test. Our brain cells’ DNA carries very unique methylation patterns that enable us to think the way we do.¹⁹ DNA methylation is a biochemical process that helps determine which genes will be more or less active. It occurs during development from an embryo through adulthood. As Institute for Creation Research Science Writer Brian Thomas points out, “If humans and chimps are close relatives, then they should have similar DNA methylation patterns in the areas of chromosomes that they have in common such as similar gene sequences. However, research teams have identified major differences.”²⁰

The human neocortex is disproportionately large compared to the rest of the brain,²¹ with a 60-to-1 ratio of gray matter to the size of the medulla in our brainstems compared to just 30-to-1 in chimps.²² Overall, humans have almost twice as many spindle cells than chimps, enabling us to pull out memories from past experiences and use them to plot our next actions. These functions activate when moral dilemmas present decisions we need to make that will directly affect other lives.

The insula part of our brains has 46 times the number of spindle cells compared to chimps—about 83 thousand for humans compared to only about 18 hundred for chimps. This makes sense because this part of our brains takes information from our skin, internal organs, and cardio system and converts it into subjective feelings such as empathy toward others who show signs of anguish or pain. We are expressive, sensitive, empathetic, and intuitive beings—but not animals.

Our **DNA** differences direct the construction of uniquely human physical attributes. For example, humans have opposable thumbs that give our hands a nearly infinite variety

of motions. We are typically 38% taller than chimps, 80% heavier, and live twice as long. Humans have white sclera that surrounds the colored iris of the eyes for rich and nuanced non-verbal communication, which the vast majority of apes do not have (some apes have a small amount, but none are equal to humans).

We **walk** upright, while chimps—with their curved fingers, long arms, and unique locking wrist systems—are designed for living in trees and walking on all fours. Their knees also point outward for climbing in trees, whereas our knees point forward so we can walk or run all day if needed.

Humans cannot **interbreed** with chimps. We can't even swap any of our internal organs with chimps. Humans build space shuttles, write songs, worship, pray, and sing. Chimps don't do any of these things. God specially designed us, formed the first of us from dust into the image of God, and gave each of us an everlasting soul. We were charged to be caretakers over the entire animal kingdom; that's why we put chimps in the zoo, and not the other way around.

Yes, we share vast DNA sequences with chimps, but we would expect this on the basis of Creation. We also share plenty of DNA with mammals other than chimps. After all, God made other mammals and man to metabolize the same food sources, grow the same basic materials like bones, teeth, muscles, skin and hair, and produce placentas and milk for the next generation. The fact that we have sections of DNA that are similar to these creatures' only shows that our designer used similar DNA instructions for making similar features and functions. It does not mean that one creature **led** to the other, or that they are related by common ancestors.

Who in their right mind would say that one software program, car, or airplane led to another all by itself? Bible-believing geneticist Dr. Jeffrey Tomkins said, "The programmer doesn't start from scratch each time he develops a new program. Instead, he uses the same general commands that he used for other projects. It shows the creator's efficiency and ingenuity." We see the same pattern of both similarity and differences in

organisms' genomes. Biblical creationists say the similarities in DNA arose because the same Creator adapted the same basic code for separate created kinds. If a gene in different creatures encodes a similar protein for a similar biochemical pathway, it is not due to evolution, but because of a single programmer. This similarity is a hallmark of all human-engineered systems, so why would we not expect to see it in God's Creation?

Consider a 3-D printer, capable of creating objects of any shape based on the programming code input by the designer. Making even minor changes to the code results in an object that looks very different. It's the same with the DNA programming our creator used for building humans and chimps. Sections of our DNA building instructions are similar, but this is because the same designer used similar coding for building the physical bodies of humans and chimps that have many similarities, but also many distinctions.

Clearly, overhyped stories of chimp-human similarities overlook some basic observations. They ignore huge sections of DNA. They exclude the possibility of intentional programming to explain similar DNA sequences, and they overlook unbridgeable physical, mental, and moral differences that all fit the Bible's account of divine Creation.

Confronting Human-Chimp Propaganda

To close this section, let's discuss a hypothetical exchange. How can you use the information in this section in conversation? First, the person makes the claim that "human and chimp DNA are genetically 98–99% identical or similar." You can ask, "Do you know roughly how many bases are in the human and chimp genomes?" If they do, great. If not, then offer the fact that the human count is about 3.097 billion base pairs and the chimp count is 3.231 billion. This equates to about 134 million more base pairs than we have, making their genome at least 4.3% larger than ours. So how is it possible to say their genome is 98–99% the same as ours, when their total genome is actually 4.3% larger than ours? Next, you might want to point

out that they excluded 25% of the human genetic material and 18% of the chimps when they came up with the 98% similarity figure.²³ If chimps and humans are significantly more than 1–2% different, as the data show they are, then there is not enough time in the supposed evolutionary timeline for that many changes to occur. It's a gap evolution can't bridge.

Ardipithecus ramidus (“Ardi”)

Suggested Videos:

www.genesisapologetics.com/ardi

Natural history museums everywhere display a line-up of ape-to-human icons that supposedly show how humans evolved from ape-like creatures millions of years ago. *Ardipithecus ramidus*, or “Ardi” is one of these famous icons, supposedly holding the “4 to 5 million years ago” time slot. Ardi is proudly displayed on the front cover of *Science* journal and school textbooks as if paleo experts are certain she holds a place in the evasive ape-to-human progression.

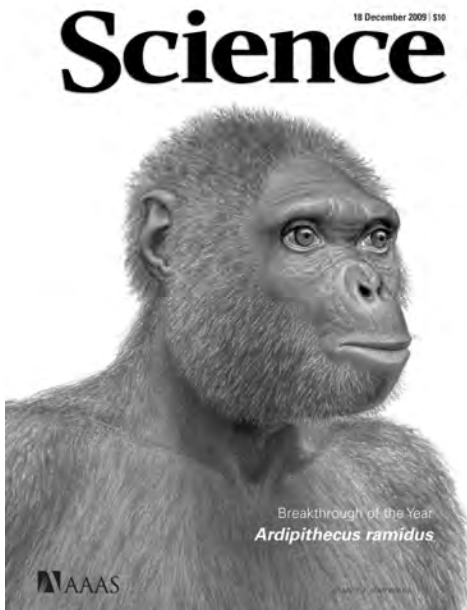


Figure 1. *Ardipithecus ramidus* (“Ardi”) on the cover of *Science*.²⁴



Figure 2. *Ardipithecus ramidus* (“Ardi”)²⁵

Did they find this complete skeleton as shown on the cover of the *Science* journal? Actually, no. This skeleton was reconstructed from over 110 bone pieces they found scattered over a 30-foot area, and it took them over a decade to put it together.²⁶ This picture is only a digital reconstruction of what they found. What they actually found were bone pieces they said were in “terrible condition” and “literally crumbled” when touched. Their lead scientist said Ardi was like “road kill.”²⁷

Let’s look at Ardi from head to toe. Her skull was found in 34 pulverized, scattered pieces that were compacted down to about one-and-a-half inches thick.²⁸ The skull of this tiny ape can fit into the palm of your hand like a softball and her brain was about the same size as bonobo or a female chimp.²⁹

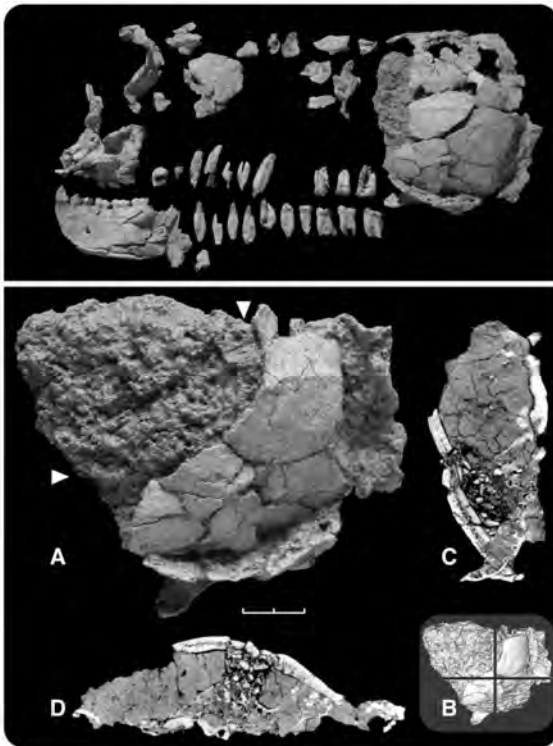


Figure 3. Ardi’s Skull³⁰

The researchers described the skull in their *Science* (2009) paper as “highly fragmented and distorted...many [recovered elements] were partially disintegrated by the silty clay sediment, and major structures were fragmentary and variably distorted.” Due to its fragile condition the skull could not be pieced together physically and so its reconstruction was approximated digitally.

Evolutionists have actually claimed that Ardi walked upright like humans, partially basing this idea on a few pieces of the base of her skull. But note that they are actually missing most of her foramen magnum, the hole where the spinal cord passes to the skull.³¹

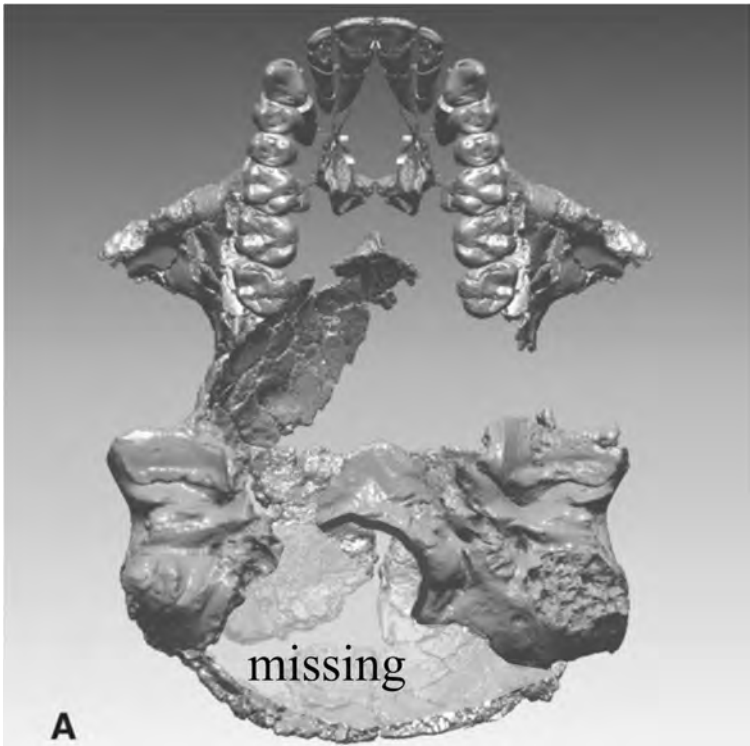


Figure 4. Ardi's Skull and Foramen Magnum (text and shapes added).³²

They also don't even have the last couple neck vertebrae that would have joined to the skull, relying on even more guesswork.³³ Evolutionists also claim Ardi walked upright because of a supposed "human-like curve" in her lower spine, called lumbar lordosis (see Figure 5). But how much of her lower spine did they find? Well—actually, none—so they estimated the curve of her spine based on her pelvis (see Figure 6).

Dr. Owen Lovejoy believes that her spine was probably long and curved like a human's rather than short and stiff like a chimp's, suggesting that she was an upright-walker.³⁴ We have four curves in our spines to facilitate upright walking, but chimps have only a slight bend over their whole spine, making them better for walking on all fours.

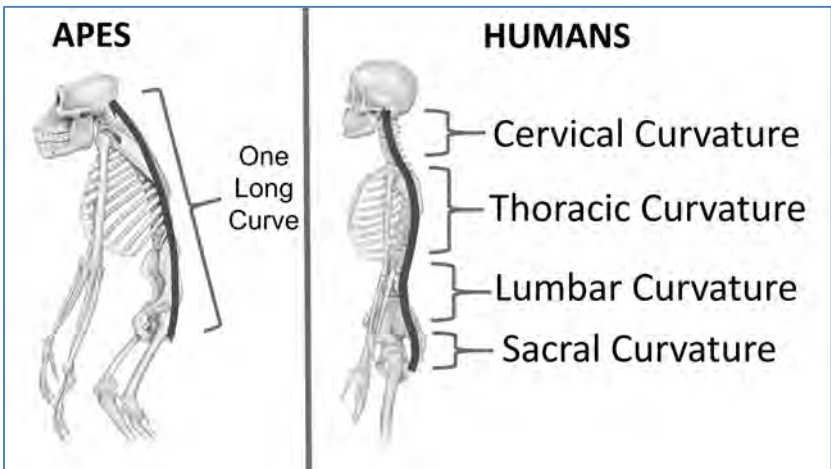


Figure 5. Ape vs. Human Spine Curvature.³⁵

Dr. Lovejoy based his belief about Ardi's curved spine on Ardi's reconstructed pelvis and his guess that Ardi had six lumbar vertebrae,³⁶ even when most apes have only three or four, and humans have five. But think about this—they don't even have *any* of Ardi's lumbar vertebrae. But this didn't stop them from adding some imaginary ones, giving her a couple

extra beyond what typical apes have, inserting an entirely imaginary spine—complete with a four-part curve like humans—and passing it up to the reconstructed base of her skull using imaginary neck vertebrae.

Even evolutionary scientists have great concerns about these speculations. In their paper published in *Nature*, Drs. Wood and Harrison stated: “The claim that Ardi was a facultative terrestrial biped [living in trees and also walking upright on the ground] is *vitiated* because it is based on *highly speculative inferences* about the presence of lumbar lordosis and on relatively few features of the pelvis and foot.”³⁷

So, if they’re also basing the belief that she walked upright on her pelvis, what was her pelvis like? Well, for starters, it was too badly broken and fragile to take out of the matrix it was in, so Dr. Lovejoy made a reconstruction based on his knowledge of primate anatomy and a Micro CT scanner. After 14 different possible configurations, they settled on the one shown in most reports.³⁸ Secular paleo-experts Drs. Wood and Harrison also expressed a great deal of concern about this—pointing out in a science journal that a whole lot of speculation went into the final pelvis reconstruction.³⁹ Dr. Jungers even said that choosing the “correct” pelvis reconstruction was like seeing images in an Rorschach inkblot test and was not convinced of its accuracy.⁴⁰

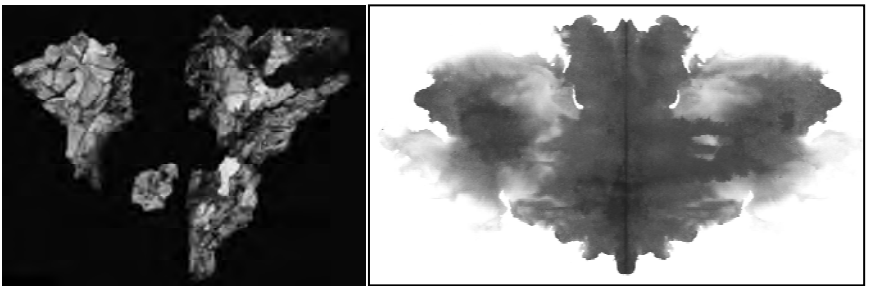


Figure 6. Ardi’s Pelvis vs. Rorschach Inkblot Test.⁴¹

Even Ardi’s hands and feet looked ape-like, with really curved, long fingers and short thumbs, which are very similar to

tree-dwelling apes of today that use them for getting around in trees. Her feet even had a grasping toe hanging off to the side (called a hallux), just like apes have today so they can use their feet like hands for grabbing branches while moving in trees (see Figure 7). Dr. White said that her toe “... really doesn’t differ from apes, and that’s the surprising thing. It is fully apelike.” Wouldn’t that be awkward—trying to walk on level ground with a big toe sticking out to the side?

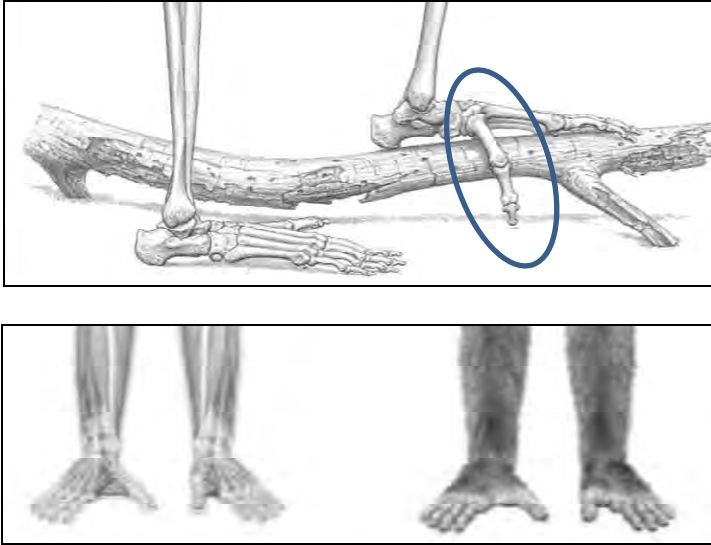


Figure 7. Ardi’s Hallux⁴²

It sure doesn’t add up that she’s some early human ancestor: Ardi had a brain the size of a chimp, in a tiny head like a chimp’s, with an imagined base of the skull and imagined, curved spine, but because of a bump on her pelvis, she was supposedly walking around like a human, with her giant toe sticking out to the side? And her hands were also ape-like. It looks like there’s a lot of speculation going on here, and in some cases even exaggeration! It doesn’t look like she’d be a good walker, but she’d probably get around in the trees just fine! When you put her next to a Bonobo, it sure seems like she fits into the ape family quite well (see Figure 8).