

The Source Workbook - Questions

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The Source Workbook - Answers

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CHAPTER 10 – WHAT IS MAN?

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q-143.1 In what ways are humans created in the “image of God?”

At Genesis 2:7, we are told that humans were created in the "image of God." That term is only used with respects humans and is associated with the "breath of life." The Hebrew word used for *breath* is nesh-ma-h (nesh-aw-maw') and is invariably applied to God or man, never to any irrational creature. Within this context, we can understand it to mean, among other things, human free-will self consciousness. This would also encompass the moral and rational nature that God gave humanity.

q-143.2 With regard to their bodies, what Biblical relationship do humans share with the animals?

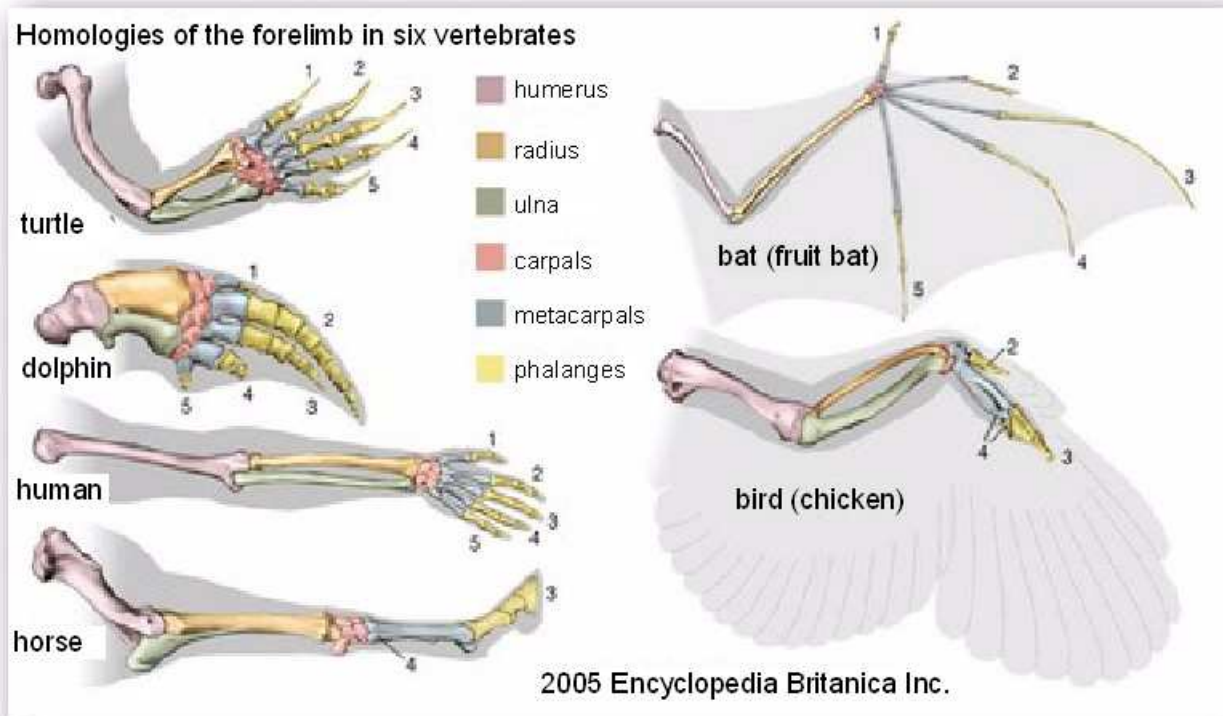


Figure 10.1: Our DNA indicates that we share biological similarities with all animals. This may be what is meant when the Bible says both animals and humans were “formed from the dust of the ground.”

Both humans and animals were made from the "dust of the ground." From this simple statement, we can infer that human and animal bodies were formed in much the same way. This statement also reminds us that when God said at Genesis 1:11 for the earth to produce a variety of plants, the earth's ecological processes did a lot to diversify and shape the resulting plant life. Therefore, when the Bible says that "man was made out of the dust of the ground," it may be a reference to how the earth's ecology influenced the design of the human body.

Page 144 INTERPRETING THE EVIDENCE; Reconstructing Forms**q-144.1 What are some of the questions we ask today that didn't seem important to the original readers of Genesis?**

Today we ask if these references are literal. Did God really make a Pinocchio-like clay image and breathe life into it. In that day and age, people thought holy idols regularly came to life and actually ate the food left by worshipers. Often the idols were made of clay because that is what was the easiest to mold into a long-lasting image. The Israelites' experience in Egypt strongly influenced their religious outlook. That is why, when Moses was away receiving the 10 commandments, they quickly reverted to idol worship. The point is, for God to make a small idol "in His image" and then breathe life into it made complete sense to those living back then.

q-144.2 What factor makes these questions important now?

The science of geology offers strong proof that the earth is billions of years old. The science of paleontology offers many proofs in the form of ancient skeletons that human-like animals (hominids) lived about three to four million years ago. All of these relatively recent findings have caused many to question whether the Bible is a reliable guide for today's world.

q-144.3 Why is placing "blind faith" in science also of concern?

It has been shown that many scientists are atheistically oriented and bias their material to favor their viewpoint. This does not mean that they falsify their findings. It means that they interpret their findings based upon the assumption that God doesn't exist. Therefore, before deciding the validity of any of these challenging issues, we want to learn more about the facts in order to come to an informed conclusion.

Page 145 Source Figure 10.1: A Baboon Skeleton; Source Figure 10.2 An Artist's Concept of Pliopithecus**q-145.1 Because of all the unknowns, by what means do we finally reconstruct the skeleton?**

Aside from the "hard" evidence like bones, we also have to reconstruct the soft tissues like ears, nose, and lips. Additionally, we cannot know anything positive about body hair. Most animals have their clothing "built-in," so to speak. Only humans need to provide their own clothing, making it possible for them to live anywhere on earth comfortably. So it would be likely that all hominids had a fur suit like a mountain gorilla or chimpanzee.



Figure 10.2: The Mountain Gorilla can live in hot and cold environments ranging from 7,000 to 14,000 feet above sea level. The temperature may fluctuate between a balmy 70 degrees to below freezing in the highlands. All of this without a stitch of clothing.

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q-146.1 Why are questions about body hair important?

It is known today that the Mountain Gorilla's hair is longer and darker than other gorilla species. This allows it to live successfully in a wide range of temperature habitats. If hominids were illustrated as having as much hair as the mountain gorilla or a chimpanzee, its identification as an animal would appear much more evident. Even though there is no viable supporting evidence, such as needles etc., hominids living in colder regions are illustrated wearing what generally looks like clothes. The claim is that skins were wrapped around the body and secured with bindings of some sort. This assumes that these creatures were able to tie knots. Imagine a Neanderthal running after a deer with his body draped in skins that are flying in the breeze, as indicated in Figure 10.3. It wouldn't be a pretty sight.

q-146.2 What comments can be made about "Nebraskan Man?"

This find is an example of some scientists being too quick to see what they want to see rather than what is really there. The scientific community has complained that creationists are still using this event to discredit all of evolution. In my opinion, Nebraskan Man should not be used in this way. However, it should be obvious that the original announcements about Nebraskan Man were premature and based upon too little evidence. That should teach all of us not to jump to conclusions until more evidence is available. It is to be noted that after additional work was done on the site in 1925, it was discovered that an error had been made in classifying the tooth. This determination was made after other parts of the skeleton were discovered and identified as belonging to an extinct genus of a pig-like animal called *Prosthennops*. Two years later in 1927, the journal *Science* wrote a retraction which clarified matters.

Page 147 Establishing Reliable Dates; Distinguishing between Lumpers and Splitters**q-147.1 Why is it prudent to hold judgment on radical findings that are occasionally made by some scientific investigators?**

This is where the principles found in the Nebraska Man experience can be applied. Because archaeology is such an inexact science, large-scale extrapolations are sometimes made. It would be wise not to believe or denounce every extravagant claim before there is sufficient evidence upon which to base one's opinion.

q-147.2 Regarding age-dating issues, what period of time is the most difficult to probe at this time?

The 2007 proposed radiocarbon 14 age-dating limit now lies in a range between 58,000 and 62,000 years (approximately 10 half-lives). The commonly used older-age radiometric dating methods are not effective for dates less than 500,000 years. For dates in between, other methods must be used. Sometimes these are reliable and sometimes not. For instance, in *Time Magazine*, Monday, June 11, 1990, an article entitled *Mistaken by Millenniums* indicated that the uranium-thorium dating method (UT) agreed with carbon 14 dates for pieces of coral up to about 9,000 years. Beyond that, the carbon 14 dates were less than UT dates by up to 3,500 years for corals found to be 20,000 years old. UT dating can be used for items less than 1000 years to a maximum of about 500,000 years. However, because of the environmental uncertainties associated with soil, the method performs best on marine animals and plants. To be safe, this method should be cross checked by other methods before being accepted as authoritative.



Figure 10.3: Imagine a Neanderthal lugging all these skins around with him when hunting. Body hair is something the fossil record does not reveal.

q-147.3 What other factors need to be considered for dating besides the evidence?

Sometimes, rivalries for funding or fame influence the interpretation of the evidence. This is not common but is a factor to consider when findings are sensationalized.

Page 148 Definition of Race; Example of Racial Variations**Page 148.1 Explain the difference between archaeologists who are “lumpers” and “splitters.”**

A "lumper" is a person who views things broadly rather than individually. A "splitter," on the other hand, sees things very narrowly and uses precise complicated definitions to create numerous categories from what a lumper would call the same thing. In the past when communication was slower, some species with different names were discovered to be, upon closer inspection, the same species. In these cases, the older species name is almost always retained to give credit to the original discoverer. This has become a naming convention known as "priority of nomenclature".

Page 148.2 What has the basic concept of “race” been used to accomplish?

Race has been used as a means of classifying people upon the basis their different physical characteristics. Things that all races have in common are generally not used as distinguishing features. However, there are physical characteristics that are common to individual groups and not to all groups. Generally, these attributes are used to classify the "races."

Page 148.3 Give an example of how long-term “racial characteristics” might develop within a community.

Long-term racial characteristics are the result of genetic separation. If for some reason a group of people get isolated, then the dominant genes they share in common will become expressed to meet their local environmental conditions as the community grows in numbers. A very good example of this is the Tutsi, Hutu and Twa tribes of Rwanda and Burundi in Central Africa.

Page 149 Application to Microevolution**q-149.1 When we see illustrations of what are called “evolutionary changes” into different species, what question should we ask?**

The differences seen in the African tribes shown in Figure 10.2 is an example of microevolution. Each of the body types shown benefit the tribes because they are suited to their chosen habitat. Genetic studies have indicated that the Tutsi's closest relative is the Hutu. This is not "evolution." It is adaptation due to genetic microevolution.

q-149.2 Give a modern example of how a “splitter vs. lumper” analysis could give conflicting evidence regarding human history.

Again, these three African tribes are a good example of the difference between a lumper and splitter. If all records were lost regarding the origin of these three tribes, a future archaeologist who was a "splitter" might conclude that these were three different human species and part of an evolutionary chain of ascent from small to large. However, if the same archaeologist were a "lumper" he would simply recognize these as being what they are, three different races of the same human species due to microevolution.

Page 150 DEFINING MAN BIBLICALLY**q-150.1 What benefit can be associated with all theories, even though they may be false?**

Humans, by nature, are curious and want to know the answers to questions that arise about the

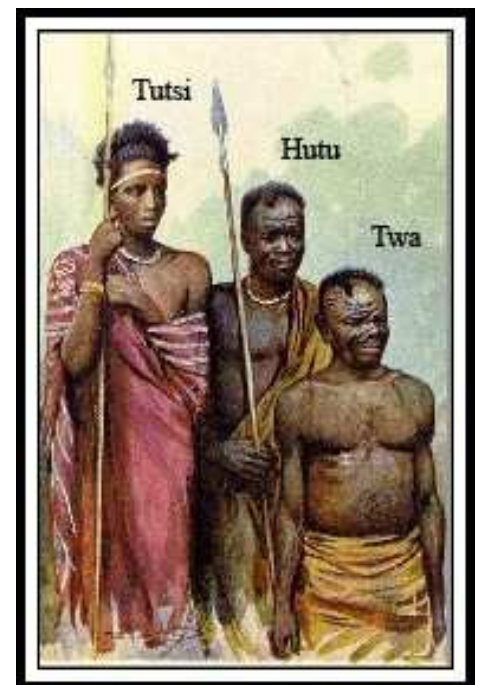


Figure 10.4: Sadly, 77% of the Hutu population was slaughtered in the Rwandan Genocide of 1994.

world we live in. How did it get here, and what will happen to it in the future? Also, how did we humans get here and what will happen to us in the future? In seeking answers to these questions, many different alternatives must be considered, some right and some wrong. Every answer tells us something, whether it is right or wrong. For instance, I once did a ground drilling probe to locate a suspected deep concrete foundation. Some thought the probe was a failure because we didn't find what we had been looking for. I, on the other hand, deemed it a successful exploration in determining where the footing was not located. This is true in many cases. Tests showing what doesn't work often lead to conducting more tests that finally show what does.

150.2 What is a proposed Biblical definition of man or humanity?

A definition of humanity from the Bible's standpoint would be creatures made in the image of God, meaning that humans were given free-will consciousness that was guided by moral and rational principles. These are mental capabilities and not necessarily physical. Monkeys and apes, while being physically similar to humans, do not possess free-will consciousness. Even though they may have 94% of humans' genes, their lack of free-will self consciousness defines them as being animals. As an interesting aside, it is noted that the original Chimp/Human gene similarity was over 99%. However, it is being found that the difference is much more complicated than first hypothesized. (Scientific American, December 19, 2006 - "Human-Chimp Gene Gap Widens from Tally of Duplicate Genes")

150.3 What question arises when we speak of the "image of God?"

We might wonder, do we look like God? The Mormon faith says that we do. However, the Bible indicates that we cannot even imagine what God must look like, and so it is impossible to make an image of Him. Of all the different mainstream religions on earth, only the Hebrew God is beyond human conception.

Page 151 Possession of a Soul; Contrast with Animals

q-151.1 How then are humans created in the "image of God?"

We possess a soul. There is some confusion regarding what the soul is. For our purposes, we will define it as being our spirit that survives death. Technically speaking, Genesis 2:4 defines the soul as being a combination of body and breath. However, Genesis 38:18 says about Jacob's wife Rachael, "And as her soul was departing, for she died, she called his name Ben-oni [son of my sorrow]; but his father called him Benjamin [son of the right hand]." So the soul departs from the body at death. It is this non-physical component of our being that is created in the "image of God."

q-151.2 By their actions, in what basic sense are humans distinguishable from animals?

Human self-consciousness is unique. There are attempts to determine if animals are also self-conscious. In one experiment, called the "mirror test," a red dot is painted on the forehead of an animal when asleep. Later, when looking in a mirror, if the subject notices the spot by trying to groom it, this is taken as demonstrating self-consciousness. However, self-consciousness is much more than that. It relates to what was spoken of in Question 151.1 regarding the human spirit and its out-of-this-world location. Animals do not have human free-will. They are entirely predictable if you know enough facts about them. Knowing this is what makes animal trainers able to get their subjects to perform so convincingly that we begin to believe some of the animals are actually a limited version of us.

Page 152 Source Figure 10.4: Tim's Drawing

q-152.1 What experiment did Dr. Kellogg perform, and with what results?

In 1931, Dr. Kellogg took a leave of absence from Indiana University to begin his experiment, which involved his son Donald and a chimpanzee named Gua. The experiment lasted nine months. It appears to have been concluded because Gua, while initially progressing rapidly, reached a plateau with little significant advancement from then on. Donald progressed slower than Gua initially but caught up and quickly passed her with no end in sight. Though it was never clearly stated, this is the suspected reason the experiment was discontinued.

q-152.2 Who was Washoe and what can we say about her apparent intelligence?

Washoe was born in September of 1965, and died October 30, 2007, at the age of 42. She was named after Washoe County, Nevada, because that was her initial location when her training started. In 1980 she was moved to Central Washington University where she lived until her death. While she accomplished a great deal during her life, there are disputes about her successes. Attempts to duplicate Washoe's accomplishments with another chimpanzee named Nim Chimpsky, by Herbert S. Terrace, were not as successful, which has called into question the appropriateness of Washoe's accomplishments. <http://www.ling.ohio-state.edu/~swinters/371/nimchimpsky.html>

**Page 153 Source Figure 10.5: An Artist's Rendition of a Chimpanzee Drawing****q-153.1 In general, what can be said about the difference between human and animal intelligence?**

The primary difference that can be obviously discerned between humans and animals is language. As the previous experiments show, animals can approximate a few words of communication but cannot carry on a conversation requiring multiple word sequences. The ability to speak has been the foundation for human development that no animal can match.

Figure 10.5: Gua (baby Chimp) and Donald Kellog. They lived together for nine months to determine whether Gua would acquire human behavior skills

q-153.2 How do humans differ from animals with regard to the "supernatural?"

Ecclesiastes 3:11, says, "*He [God] has made everything beautiful in its time. He also has planted eternity in men's hearts and minds [a divinely implanted sense of a purpose working through the ages which nothing under the sun but God alone can satisfy], yet so that men cannot find out what God has done from the beginning to the end.*"

Because we have eternity planted in our hearts, we are continuously asking God not to forget us because we know that someday we are going to die. Animals only live by instinct and do not know that they will someday die. For that reason, an animal has no spiritual needs to satisfy.

Page 154 Instinct and Conditioning**q-154.1 What does it mean to "anthropomorphize" our pets?**

We sometimes tend to think that our pets see us as we see them. That would be anthropomorphizing them. As hard as it is to believe, our pets react to us by instinct alone. God made them that way to protect them. Because our pets live so close to us, they are in danger of being mistreated like play animals. I had a big Teddy Bear that I used to beat up so much that his nose went "in" instead of "out." However, if every time I hit it, my Teddy Bear yiped like my dog, I would have stopped at the first blow. So to a large extent, it is good for us to treat animals as we would want them to treat us as long as we don't become unreasonable about it. For instance, spending hundreds of thousands of dollars to rescue a sick whale whose guidance systems have gone haywire because we think we are being kind is a sad waste of time and money. That is why God created Killer Whales, to mercifully relieve such defective animals of their duties. Having said this, one must also recognize that animal pain is a very disputed area and the politically correct assumptions are that animals feel pain just as we do. Animal rights groups are continuously seeking to accentuate the humanness of animals in order to gain legislation that may eventually give them human rights in the eyes of the law. The theory of evolution makes it much easier to view animals and humans as being like cousins who are many times removed from a common

ancestor. So why shouldn't one be subject to a jail term or a heavy fine for assaulting a distant animal relative?

q-154.2 What does not motivate an animal in its treatment of others?

An animal has no conscience or sense of right or wrong. I know, it is said that dogs have a conscience but cats do not. Actually, again, when a dog behaves guiltily, it is instinctive. However, animals can be trained to appear to have many human qualities, such as love, loyalty, obedience and many others. One of the saddest stories I heard that exemplifies this fact is about a prize hunting dog that was accidentally locked in a food storage cellar where they kept butchered meat under lock and key. The owner thought the dog was lost and began looking for him without success. Some time later, the dog was found starved to death in the locked cellar with edible food all around him. However, because of his training, he would not touch anything resembling meat or game without permission.

q-154.3 For what is the Russian physiologist, Ivan Pavlov, noted?

Ivan Petrovich Pavlov was born September 14, 1849, and died February 27, 1936. He was a Russian physiologist, psychologist, and physician. In 1904, he was awarded the Nobel Prize in Physiology or Medicine for work associated with the digestive system. However, his basic claim to fame had to do with what has been called "conditioned reflex." Ironically, this is actually an incorrect term that was coined based upon a mistranslation of the Russian term "conditional reflex." Nevertheless, the mistake has persisted and led to the development of an elaborate behavioral hypothesis called "conditioning." Pavlov's influence not only extended to scientific subjects but also included popular culture. It is likely that not many are aware that Aldous Huxley's "Brave New World" (1932) was greatly influenced by Pavlov's writings. Fortunately, his fame as a Nobel laureate gained him the support of Nikolai Lenin. As a result, Pavlov was highly regarded by the newly established revolutionary government of the Soviet Union until his death in 1936.



Figure 10.5: Alex, an amazing African Grey Parrot, solving a puzzle. Note: It is sad to report that Alex died in 2007. Click here to view a 3 minute video-tribute to his accomplishments. Notice how Alex talks with his throat and not his beak.

q-154.4 How are parrots an example of instinctive intelligence?

Irene Pepperberg has worked with parrots most of her life. She has two highly regarded African Grey Parrots named Alex and N'kisi. Alex has learned to not only use words but can also identify objects, along with describing and counting them. When it comes to complex questions like, "How many red squares?" Alex answers with over 80% accuracy. Irene's other African Grey, N'kisi, has a vocabulary of approximately one thousand words. N'kisi also appears to invent words, displaying the ability to use them correctly with regard to both context and tense.

Page 155 Capacity for Language

q-155.1 What can a parrot do with language that humans can't do? If you don't believe that, try saying "put" without bringing your lips together.

Parrots can make "p" and "b" sounds without bringing their lips together because they don't have lips. Though it is not precisely known why the birds want to imitate human speech, the actual mechanics of the process is generally understood. Parrots lack vocal cords, but can recreate vocal sounds by expelling air through a special connector between their trachea and double bronchial

tubes called a **syrinx**. Incidentally, this is how all birds make sounds. Because the double bronchial tubes provide two different sources of air, some birds can actually sing two different songs at the same time. By somehow changing the shape of the syrinx, parrots are able to mimic many of the sounds they hear. Also, their thick tongues allow them to vary sounds just as our tongues do, which aids them when imitating human speech. This talking characteristic is noticeable when you watch a parrot start to speak. It is as if they are trying to cough something up before the words come deep from within their throats. Historically, parrots have been kept as pets with one particularly interesting reference made by Rumi of Persia in his work "Masnavi" in AD 1250. In describing how to teach parrots to speak, Rumi said: "Parrots are taught to speak without understanding the words. The method is to place a mirror between the parrot and the trainer. The trainer, hidden by the mirror, utters the words, and the parrot, seeing his own reflection in the mirror, fancies another parrot is speaking, and imitates all that is said by the trainer behind the mirror."

q-155.2 What can't an animal be trained to do?

While animals can imitate human emotions, it cannot truly feel or conceptualize them.

q-155.3 What is remarkable about "consciousness?"

That we have a soul or spirit that is independent of the body is implied by the expression "free-will consciousness." In this universe, unless a miracle takes place, everything is subject to the laws of physics. Being restricted by such laws does not allow for free-will to exist. In other words, everything we think must be predictable in accord with the laws of physics. The only way we could have "free-will" is if our minds or souls existed outside of or beyond the laws of the universe. So you can see that being created in the "image of God," who is outside of the universe, implies that our minds were created in the image of God's mind and exists with Him outside of time and space. Being outside of time and space means that our minds are truly free and can think unpredictable things independent of the laws of nature. This concept is currently being studied under the heading of "quantum consciousness or Quantum Mind."

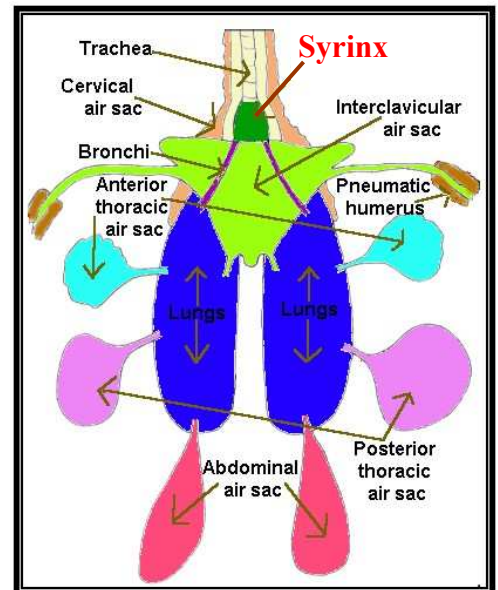


Figure 10.7: Parrots talk through the use of their **Syrinx**.

q-155.4 How is language related to our sense of "self?"

We need to be able to talk to ourselves in order to organize our thinking. Historically, no hominid had a language and therefore does not qualify as human. Without language, there is no "self." The topic of the origin of language (glottogony) has been a subject of speculation for as long as humans have existed. It has been generally conceded that only humans can communicate with language, as distinguished from a basic communication of emotion or events involving physical states of mind. Babies and animals, lacking language, communicate at the basic level as was demonstrated by the Kellogue experiment with Donald and his chimpanzee associate Gua. The science of studying languages is called linguistics. Based on extensive studies, linguists have concluded that there are no existing primitive languages, but all are of relatively equal complexity. No matter where clear evidence of languages is found both past and present, all are based on rules of grammar and syntax, which are flexible enough to provide a speaker with the ability to clearly express all conceivable ideas. If events were encountered that were beyond description, then new words would be added to fill the void. Because this ability is not limited to any particular race, every child is born with an instinctive mental framework upon which to quickly acquire a language by simply listening to it being spoken.

Page 156 Creature without a Soul; The Difference between Macro- and Microculture**q-156.1 What are hominids, and when were they created?**

Hominids are animals designed to walk upright. In appearance, the last hominids, with the exception of body hair, would look very similar to modern humans. For all intent and purpose, we can say the present evidence suggests the first hominid was created about 4 Mya. Based upon the existence of these discoveries, one is faced with the challenge they present. A challenging question we must acknowledge is that if God created humans only 6,000 years ago, then what was the purpose for creating all these other human-like animals that have been extinct longer than that?

q-156.2 How has a loose definition of the word “culture” been applied in modern times?

Broadly speaking, culture has been defined by some anthropologists to mean the transmission of knowledge through instruction and not by instinct. According to this definition, many animals are said to be cultural.

q-156.3 What is the basic difference between micro- and macroculture?

These terms distinguish between "simple" and "complex" transmission of knowledge to subsequent generations.

q-156.4 Explain why macroculture is only demonstrated by humans.

Macroculture involves complex activities that can only be accomplished by free-will conscious humans. This fact is nicely summarized in *The Cambridge Encyclopedia of Human Evolution*, which says:

"Around 40,000 to 35,000 years ago, soon after the appearance of fully modern people, we see remarkable changes in the archaeological record. For the first time, items of personal ornamentation, elaborate burial of the dead, the beginnings of art, and many other results of cultural behavior become manifest. The evidence is absent from the archaeological record of previous hominid species" (page 366, Cambridge University Press, 1992-1999).

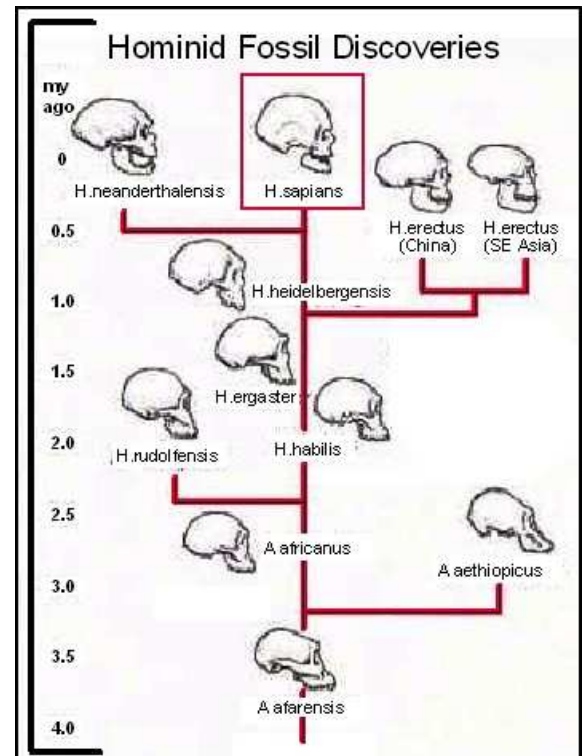


Figure 10.8: This arrangement is the proposed timeline for hominids. With the exception of *H. sapiens*, all the above are animal fossils that have been discovered.

Page 157 Stone Tools**q-157.1 Give an example of microculture.**

An example of microculture is demonstrated when a young chimpanzee learns by observation to push a small twig into a hole as a tool for capturing termites to eat. Many animals display microcultural habits that are learned and not inherited as instinct. It is apparent that when God created these animals, He enabled them to quickly change as necessity might demand. By learning things after it is born, an animal can immediately adapt to local conditions. However, an insect like a spider who inherits its knowledge may need a dozen generations or so to adapt to the slowly changing environment that it inhabits.

q-157.2 What kind of behavior do hominid stone tools represent?

Hominids that made stone tools were also the product of microculture and "mimetic behavior." Like the young monkey of the previous question, hominids were good mimickers. The production of early stone tools did not take human intelligence. Any animal with the required motor skills and

an opposable thumb would find the operation well within their capabilities.

q-157.3 What do we normally picture in our minds when we hear the term “stone tools?”

When we hear about stone tools, we might be thinking of something like Indian arrowheads. These types of stone tools are very complex and well beyond the capabilities of any hominid to make.



Figure 10.9: OLD CALIFORNIA INDIAN ARROWHEADS — These authentic old California Indian arrowheads photos are as pictured (photographed through the display glass) in the RIVERSIDE MUNICIPAL MUSEUM in Riverside California.

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q-158.1 What did early hominid stone tools look like?

Many just looked like naturally broken rocks. However, if they are located in an area where one wouldn't normally expect to see such rocks, then another explanation is needed. There are only so many different ways rocks can be transported. One way would be that they were carried by an animal that can travel over land like a hominid. Also, when you see chips of rocks scattered around a site that can be fitted back into some of the other larger chipped rocks (like a jigsaw puzzle), then it is fairly evident that the rocks were shaped or chipped at the site where they were found and can be properly called tools.



Figure 10.10: Stone Tools (handaxes) from actual archaeological site dating to 1.2 to 1.3 million years ago.

<http://www.mc.maricopa.edu/dept/d10/asb/anthro2003/origins/koobi/koobi7.html>

q-158.2 What problem regarding “tool use” makes the tool classification process suspect.

Thousands of broken rocks are classified as tools even though their actual use remains a mystery. You can see in Figure 10.10 the likely difficulty in identifying and classifying stone tools. The problem is magnified by the age of the rock because much of the detail of the broken edges have weathered. However, the most durable tool rocks are very hard and, if conditions are favorable, can resist weathering to a high degree. This allows for the edges to be viewed with a scanning microscope to determine what the various tools were used for. Experimenters create similar stone tools today and then use them to do tasks early hominids needed to perform. Then they compare the markings on the edges of the fossil tools with those produced under known conditions to determine how the tool might have been used. Another use for the microscope, as shown in Figure 10.11, was to inspect the marking on animal bones found on sites with stone tools present. Again, modern experiments are performed to create a basis for categorizing fossil bone specimens by their microscopic markings. In this way, it can be shown experimentally that the creatures whose fossil bone specimens were found on a site were either killed or scavenged by animals or by hominids or both. Sometimes, animal tooth marks are found with tool striation marks superimposed over them. This indicates that a hominid may have chased off the original predator and completed the job or savaged a kill left after the predator had eaten its fill. Another factor involves single and double faced tool edges. Single faced edges can be broken naturally, but double faced breaks that form a hand ax scraper would be very unlikely to occur naturally. By using specific classification standards based upon experimental data, large numbers of site specimens classified as "tools" have been reclassified as naturally broken rocks. Nevertheless, it appears that the evidence indicates that early hominids did use crude tools.



Figure 10.11: (a) A cut mark on a modern bone made experimentally with a stone tool, showing the striations that typically accompany a single mark seen by eye on the bone surface. (b) A series of grooves with the distinctive characteristics of a stone-tool cut marks on a fossil bone from one of the 1.8 million-year-old sites at Olduvai. (c) A scratch with the characteristics of a carnivore tooth mark on a fossil bone from another site, also 1.8 million years old, at Olduvai (The Cambridge Encyclopedia of Human Evolution — pp. 131).

q-158.3 How did early hominid tool use differ from modern day tool use?

Terminology such as "tool industry" and "tool kit" are somewhat deceptive because they imply far more than the facts allow. However, for the sake of consistency, every science has to develop its own jargon in order to effectively communicate with other professionals. In this regard, tool industry simply refers to the making of tools and tool kit refers to the various tools made. These tools made by early hominid animals were not much more intellectually complicated than tools made by some animals living today when you consider the comparative limited physical dexterity of each.

q-158.4 What mistake in human classification is made?

The term "Homo" means "human" is used to designate hominids that used tools and therefore are considered to be a primitive human ancestor. This, in my opinion, is deceptive because if we could have actually seen the way the creatures looked and acted, we probably would not have thought of them as human any more than we do modern apes.



Figure 10.12: "So what's this? I asked for a hammer! This is a crescent wrench! — Well, maybe it's a hammer. ... Darn these stone tools."
<http://www.cartage.org>

Page 159 Source Figure 10.8: How Stone Tools Have Changed over Time; DEFINING MAN ANTHROPOLOGICALLY

q-159.1 Name the different Stone Age periods and how long each is said to have lasted.

There are three Stone Age periods that lasted from about 2.7 Mya down to the present. We say present because there are people today who are considered to be "stone age." These would refer to isolated groups of aboriginal tribes, such as those living in the Amazon basin, as well as Africa. In some regions, the Stone Age is divided into the Paleolithic Age (Old Stone Age) and the Neolithic Age (New Stone Age). In other regions, the Stone Age is divided into the Paleolithic Age, the Mesolithic Age (Middle Stone Age, also called the Epipaleolithic Age), and the Neolithic Age. For

perspective, the Stone Age was the first of the three-age system, followed by the Bronze Age and concluding with the Iron Age. The Copper Age (aka Chalcolithic Age), because it overlapped the end of the Stone Age and the beginning of the Bronze Age, is generally considered as a transitional period.

q-159.2 How should early tool-using hominids be classified?

As has already been asserted, hominids are clearly animals when compared to image-of-God humans. As shown in Figure 10.13, the tools made by the early Homo hominids were crude by any standards. It was difficult to even know with any certainty that the broken rock specimens were even tools at all. Of the thousands that have been so labeled, only a handful have been actually classified as tools. This crude operation continued with very little change for about 2,250,000 years. At about 250,000 years ago, a moderate change took place that has been called the Middle Stone Age. The tool making process of that age was more efficient than the Early Stone Age, with about 10 times as many inches of edge produced per pound of rock processed. However, an unexplained but significant change in tool making standards and efficiency took place about 50,000 years ago. Since that time, the inches per pound of rock has increased another tenfold or about 100 times as much as when stone tool production first began. Based upon these findings, it appears that about 50,000 years ago, an event occurred that marked the beginning of the Human race as we define it today.

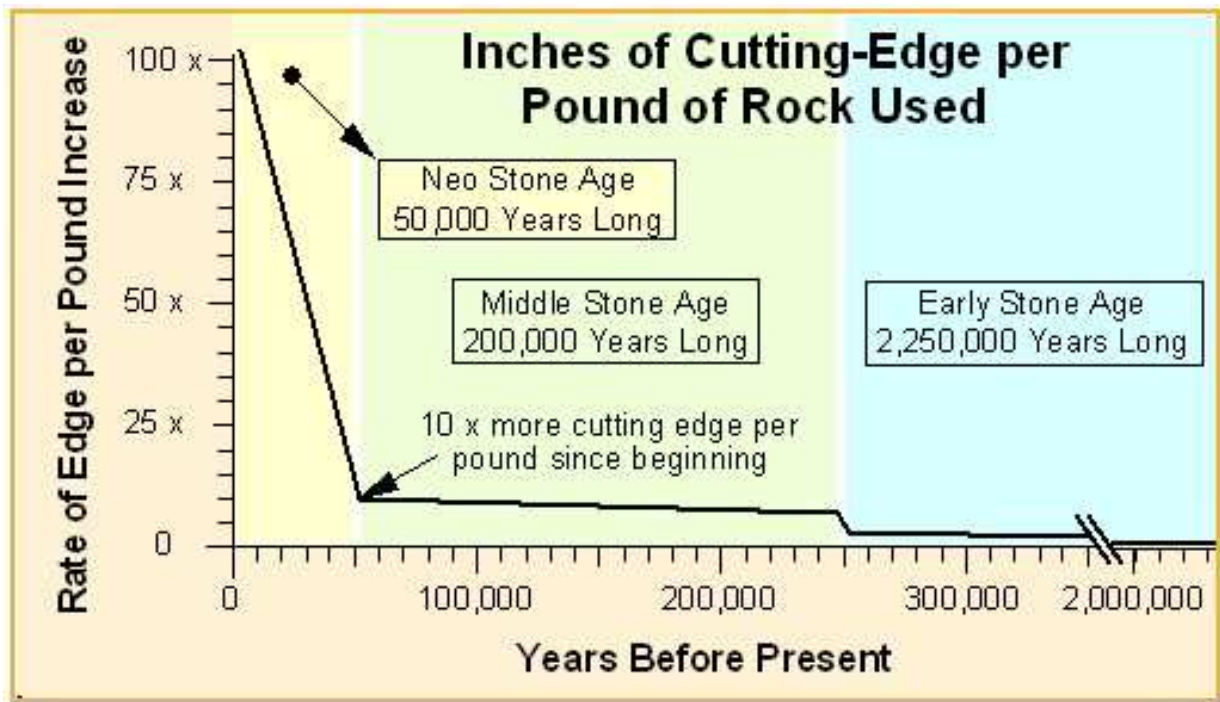


Figure 10.13: This shows vividly how hominid tool making compares with human tool making. At about 50,000 years before the present, image-of-God humans make their appearance. This was the beginning of human culture and religion. By the end of the Neolithic, humans were able to produce about 100 x more Cutting-Edge inches per pound of rock than the Early Stone Age hominids.

Page 160 Physical Attributes vs. Soul

q-160.1 Why is an accurate definition of what is human important today?

Many young people have the misimpression that cave men and women were primitive looking humans that communicated in a simplified, "Me Tarzan, you Jane," type language. This is not the case. All language is highly complex and appears to have suddenly come into existence around 40 to 50 thousand years ago.

q-160.2 What popular museum display has been labeled factitious?

The concepts depicted in the picture of the marching line of changing body shapes leading up to the emergence of the human form as shown in Figure 10.14 are not supported by the facts. One of the most deceptive components of the illustration is the apparently diminishing amount of body hair on the animals shown.

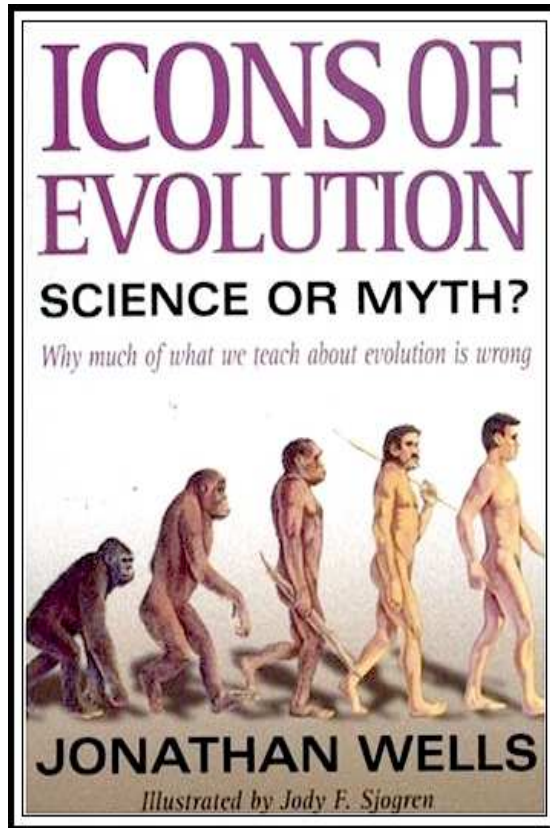


Figure 10.14: In this book, Jonathan Wells points out that, despite the lack of evidence for the famous drawing, it continues to be used in “countless textbooks, museum exhibits, magazine articles, and even cartoons. ... Such drawings are (in Stephen Jay Gould’s words) ‘incarnations of concepts masquerading as neutral descriptions of nature.’” This is the picture Darwin no doubt had in mind despite the lack of direct evidence at the time.

Nevertheless, he was convinced that corroborating support would be discovered in the future. It is true that a large number of relevant facts have been uncovered that raises serious questions about human origins.

However, if Darwin were living today, he would likely agree that the support he was hoping for is still lacking.

q-160.3 What method do many modern anthropologists use to determine humanness?

Anthropologists have established a list of distinguishing features that are associated with a normal human body. Using these as a standard, any animal fossil that displays similar features would be considered to be a member of the human evolutionary chain.

Page 161 Source Figure 10.7: Physical Attributes Said to Be Unique to Humans**q-161.1 Of all the characteristics listed in Source Figure 10.7 as being human, what is missing?**

Of course, there is no mention of the unseen soul of man. In fact, the features listed in Source Figure 10.7 are representative of body forms that have been found in the fossil record which do not have image-of-God souls. Even though they may not be directly related, they, nevertheless, are all classified as animals because they all existed before Adam was created. There is evidence that many of the human-like skeletons found lived before Adam was created. If the illustration shown in Figure 10.14 included a complete covering of fur for the human-like creatures like that of the first member in the line up, the concept of humanness would be greatly reduced. Only the truly human member in the line is known to have worn some manner of clothing appropriate to local climatic conditions.

q-161.2 Based upon the fossil record, have animals ever existed that looked very human?

Animals with what are considered modern human bodies appear in the fossil record about 100 thousand years ago. However, the journal *Nature* published a study in its Thursday Feb. 17, 2005 edition, featuring two skulls found near the Omo River in Ethiopia in 1967 by Richard Leakey.

Originally, these skulls were thought to be about 130,000 years old (which was older than expected) but have now been dated to 195,000 years, the oldest date known for a modern human skull (McDougall et al. 2005). The scientists estimated their dates by radiometrically analyzing mineral crystals in volcanic ash layers above and below the deposits of river sediments that contained the skulls. The higher layer was estimated to be 104,000 years old with the lower layer being about 90,000 years older. It was decided to associate the skulls with the lower level which made them much older than originally thought. It is my opinion that this is one of those situations where additional data in other areas will be needed for the older date to gain more credibility. You must keep in mind that there is a high financial incentive to find older human specimens. So for the present the 100,000 year old date still stands until proven otherwise with better evidence. No matter which date you accept, the evidence seems to indicate that the modern human body skeleton preceded Adam by about 50,000 years. These recent finds were still skulls of animals because they did not possess an image of God's soul and they left no evidence that they possessed human intelligence. They could not "think and communicate" as one would expect humans to do. (See Figure 10.13) In a BBC broadcast it was agreed that in Europe there is evidence of an abrupt transition in humanity's ability to think beginning about 43 to 35 thousand years ago. (<http://www.bbc.co.uk/science/horizon/2003/learnthinkqa.shtml#links>)

Page 162 Hominids vs. Prehistoric People

q-162.1 Based upon the Biblical definition of man, what is a "Caveman?"

Very simple. A Caveman is a human who lived in a cave after about 50,000 years ago. Often caves provided good shelter that was obtained quickly with minimal effort. However, caves used for long-term human habitation were often improved with artificial walls that provided some degree of individual privacy. Even today, the infamous Osama bin Laden is thought to be living in a cave somewhere in Pakistan. In that sense, he could be called, among other things, a "caveman."

q-162.2 To whom does the book, *The Source*, refer when it uses the term "human" or "people?"

When *The Source* uses the term "human," it is in reference to descendants of Adam and Eve. There is considerable controversy regarding when Adam and Eve were created. If you go with the evidence as we understand it today, it would appear that they were created about 50,000 years ago. However, there is the "gap" theory about Adam and Eve put forth by Scofield that says Adam and Eve were not the first humans and that they were inserted into the human family similar to the way Jesus Christ was inserted and for the same reasons. According to Scofield, that is why Jesus was called the second Adam. God intended that the first Adam provide the means for all humanity to be perfected. They did not need a sacrifice for sin at that time because there was no law given by God to be broken. However, after Adam sinned, then a sacrifice for sin was needed. We are not going to go into the details of this theory here, but there is a book by Dick Fisher entitled, *The Origins Solution -- An Answer In The Creation - Evolution Debate* that discusses the matter in detail.

q-162.2 Are modern apes hominids?

The answer to this question used to be a clear "no." Before the 1960's, humans (Homo) and apes were in two separate classes. Humans were in family Hominidae and apes were in family Pongidae. After 1960, classifications were

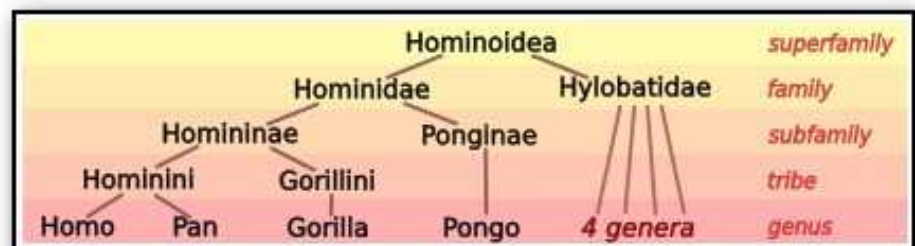


Figure 10.15: New classification placing humans and chimpanzees within the same "tribe."

starting to be determined by evolutionary standards and began to change. In the 1990s based upon a new classification scheme called cladism, humans and chimpanzees (Pan) were placed within the same "tribe" called Hominini. However, this tribe is further divided into another subtribe called

Hominina or the "human" branch that includes all hominids but not chimpanzees. So the answer to the questions as to whether apes are considered hominids is a qualified "no." Technically, all members of the tribe Hominini can be included as hominids, but only the subtribe Hominina actually meets the original definition of being a bipedal, erect standing primate. Chimpanzees are not considered erect standing.

Page 163 No Questions

End of Chapter 10
