Chapter 1

The Nature of Evidence

For this origins debate, I will be using DNA, fossils, and rock layers to support my position," said the evolutionist.

"That's odd," said the creationist. "That's exactly what I was going to use to support my position!"

What is the place of scientific evidence in the debate over origins? Do things like DNA, fossils, and rock layers really support evolution? Do they support creation? Many people (whether creationist or evolutionist) might say that unbiased investigation of scientific evidence is the absolute standard by which the origins debate can be settled. However, such a view does not stand up to careful scrutiny for reasons that we will address in this chapter. Some people take the opposite position; they believe that scientific evidence is utterly irrelevant to the origins debate, the issue being more a matter of faith than reason. However, this too is overly simplistic and will not stand up to rational investigation.

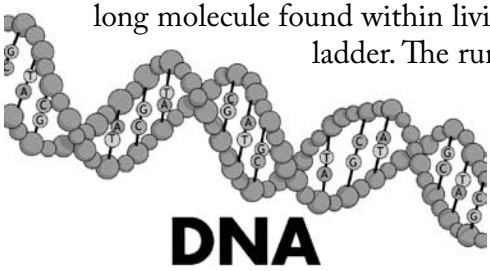
Scientific evidence is very useful when it comes to discussions about the origin of life, the universe, the age of the earth, and so on. Indeed, there are many evidences that confirm that God did create the heavens and earth supernaturally several thousand

years ago, just as the Bible teaches in Genesis. In fact, the scientific evidence is so compelling that many creationists simply cannot understand how anyone could possibly believe in evolution. But scientific evidence by itself will not settle the matter, as we will shortly see. Nonetheless, it is important to be aware of a few of the best scientific arguments for biblical creation. So, let's begin with some great (but not *ultimate*) evidences that confirm Genesis.[1]

Information Science

One of the most compelling, commonly used scientific arguments for creation involves the field of information science. In this technological age, we are inundated with all sorts of information every day, but few people stop to consider what information really is, and where it comes from. Scientifically, we can define information as a coded message containing an expected action and intended purpose. Under this definition, the words of this book qualify as information. They are encoded — the words represent ideas. The expected action is that the reader will read and act upon the words, and the intended purpose is that the reader will become better at defending the Christian faith.[2]

DNA also contains information. DNA (deoxyribonucleic acid) is a long molecule found within living cells and resembles a twisted ladder. The rungs of the ladder form a pattern of base pair triplets that represent amino acid sequences — the building blocks of proteins. DNA contains the "instructions" to build the organism. So different organisms have different DNA patterns. DNA qualifies under the definition of information: it contains an encoded message (the base pair triplets represent amino acids) and has an expected action (the formation of proteins) and an intended purpose (life).



Whenever we find any sort of information, certain rules or "theorems" apply. Here are two such theorems:

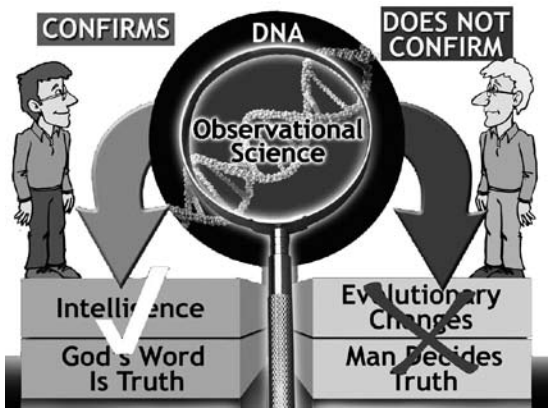
1. There is no known law of nature, no known process, and no known sequence of events that can cause information to originate by itself in matter.[3]

2. When its progress along the chain of transmission events is traced backward, every piece of information leads to a mental source, the mind of the sender.[4]

The first tells us that matter does not spontaneously generate information. The second tells us that only a mental source (a mind) can generate new creative information. In one sense, these theorems are hardly profound; we take for granted that when we read a book it has an author. No one reading this book would conclude that it was generated by a sequence of typos that gradually accumulated over time. Now certainly this book might be a copy of a copy of a copy, but you take it for granted that a mind is ultimately responsible for the information therein (regardless of whether you agree with the information!). The theorems of information science confirm this.

Likewise, these theorems tell us that life cannot have come about as the evolutionists claim. The information in DNA cannot have come about by mutations and natural selection because the laws of information science tell us that all information comes from a mind. But the information in DNA makes sense in light of biblical creation. It was by the mind of God that the initial information was placed in the DNA of the original organisms on earth. That information has been copied many times, and some of it has been lost. But the information in our DNA ultimately comes from God, not by a random chance process. The laws of information science confirm creation.

Sometimes evolutionists will object to this and will point out that mutations occasionally have survival value; they "improve" the organism under certain circumstances. This is true, but it is not relevant to the argument. Mutations have never been observed to add brand-new information, and thus they cannot be the driving mechanism of evolution. Sometimes mutations will cause a section of DNA to get duplicated, but does this really increase the information?



Not at all. By analogy, a copying error in a book may cause a paragraph to get duplicated. But surely it adds no new information. After all, could you learn anything from the duplicated paragraph that you couldn't learn from the original? Creative information cannot spontaneously increase by chance. It is always the result of intelligence. The theorems of information science tell us this, and our experiences confirm it.

Irreducible Complexity

Another argument that is often waged against evolution concerns the incredible complexity found in living things. Darwin could not possibly have anticipated the astonishing intricacy of even the "simplest" single-celled organism. Every living cell of every organism contains a host of complex biochemical machines, each cooperating with the others to enable the survival of the entire cell. The parts of the cell are interdependent; if any one of them malfunctions, it can lead to the death of the entire cell. In multi-cellular organisms, the cells themselves are specialized, each performing a different task to contribute to the survival of the whole organism. Hearts, kidneys, and lungs all work together — without one the others could not survive.

Interdependent parts challenge the idea of particles-to-people evolution. Evolution is supposed to happen in a gradual, stepwise fashion. One by one, mutations are supposed to gradually change one kind of organism into another. So we must ask the question: which evolved first — hearts, kidneys, or lungs? Each is useless without the other two. A stepwise evolutionary process for any interdependent system would seem to be impossible at the outset.

Even within a single living cell, how could the various parts have come about in a gradual fashion? Each part cannot survive without the others. Such a system is said to be "irreducibly complex" because its complexity cannot be reduced without destroying functionality. Any irreducibly complex system cannot have come about by an evolutionary process, since every piece requires all the other pieces at the same time.

Many machines made by human beings are also irreducibly complex. A car does not work unless all of its essential parts are functioning. Since many of the parts of a car are irreducibly complex, it would be logical to conclude that a car is not made by an evolutionary process. It is skillfully planned and made by people who have designed every part to function with all the others. Likewise, living beings have been

designed by a Master Planner who has skillfully prepared every part to function together with all the other parts.

Age Indicators

One additional point of conflict between creationists and evolutionists concerns the time scale of origins. Did life take billions of years to come about, or was it created in a short amount of time in the recent past? A number of evidences challenge the secular claim that the earth is billions of years old. Many could be listed, and in fact have been listed, on the Answers in Genesis website and in other resources.[5] Here we will examine just a couple to get the flavor.

Many people have heard of carbon dating. However, most laymen are under the mistaken impression that carbon dating is used to show that the earth is millions or billions of years old. This is not the case. Carbon dating always gives ages much less than this, even on things that are allegedly millions or billions of years old. The reason is that the C-14 isotope is short-lived. Here's how it works.

Most carbon is a stable variety called C-12, but a small fraction of carbon is C-14, which is unstable. Unstable means that C-14 is constantly *decaying* — it is continually and spontaneously changing into nitrogen. This happens slowly, one atom at a time. The rate is such that in 5,736 years, half of the C-14 will have decayed into nitrogen. After another 5,736 years, half of the remaining amount will have decayed, leaving only one-fourth of the original, and so on. So by making certain assumptions and then measuring the amount of C-14 in an ancient sample, scientists are able to make an estimate of the age.

Since C-14 decays fairly rapidly (at least compared to the secular alleged age of the earth), it would decay to an undetectable amount after 100,000 years. In fact, if the entire mass of the earth were C-14, after one million years not even one atom would be left! So it may come as a shock for those who believe in an old earth to learn that C-14 has been found in allegedly very ancient substances, such as coal and diamonds — coal supposedly formed millions of years ago, in the evolutionary view. And the diamonds in which C-14 has been found are supposed to be over a billion years old in the secular view! The presence of detectable C-14 indicates that the true age of these things is only a few thousand years. Carbon dating certainly challenges the billions-of-years view.

In fact, C-14 is found in virtually everything that has carbon in it, even deep down in rock layers that evolutionists believe to be hundreds of millions of years old. Yet, if those rock layers really were so old, they should not have even one atom of C-14 in them. These results are perfectly consistent with biblical creation. According to Genesis, the entire earth is not much more than several thousand years old, so it's hardly surprising to find C-14 in just about everything. This is exactly what the creationist would expect. But carbon-14 is a serious challenge to the evolutionary system with its billions of years.

Such evidences for youth can even be found in outer space. Comets are certainly consistent with the relative youth of the solar system but they pose a problem for the secular view. Comets are made of ice and dirt, and they orbit in elliptical paths that occasionally bring them close to the sun. When a comet passes close to the sun, solar radiation heats the comet, causing its icy material to vaporize and disperse into space. This lost material is swept back by solar radiation and solar wind; this is what forms the comet's tail.

Since comets are constantly losing material, they cannot exist forever. It has been estimated that a typical comet can last for a maximum of about 100,000 years before completely running out of material. This is not a problem for the biblical time scale, but it certainly runs against secular thinking. If the solar system were really billions of years old, as evolutionists believe, then why do we still have comets?

Evidence and Rescuing Devices

The scientific evidence certainly confirms biblical creation and appears to defy evolution. Many other evidences too numerous to list could also have been used as examples. It may seem that evolution stands refuted. It may seem that we have proved beyond doubt that scientific evidence proves biblical creation and disproves the notion of evolution. But this is not the case.

The above illustrations are very good arguments indeed. But they are not an *ultimate* proof. They do not actually prove biblical creation, nor do they utterly refute evolution or billions of years. The reason is that an evolutionist can always invoke what we might call a "rescuing device." That is, an evolutionist can invent a story to explain away apparently contrary evidence. Let's see how this works with the comets' argument for a young solar system.

The evolutionist astronomer believes that the solar system is billions of years old, yet he sees comets within it. He can observe that comets disintegrate quite rapidly, and he computes that they can only last 100,000 years or so. How is he to resolve this dilemma? "Obviously," says the secular astronomer, "there must be a source that generates new comets to replace the old ones as they disintegrate." So secular astronomers have proposed that there is an "Oort cloud" (named after its inventor, Jan Oort). The Oort cloud is an enormous hypothetical sphere of icy masses surrounding our solar system. It is supposedly far beyond the most distant planets, beyond the range of our most powerful telescopes. Secular astronomers propose that occasionally, objects in the Oort cloud are dislodged from their distant orbit and thrown into the inner solar system to become brand-new comets. Since these new comets continually replace the old ones, the solar system could be billions of years old after all.

Rescuing device: a conjecture designed to save a person's view from apparently contrary evidence

Now keep in mind that no one has ever seen an Oort cloud. By construction, it is supposedly much too far away to detect the small objects within it. Currently, there is no observational evidence of any kind for an Oort cloud. So, as a creationist, I have no particular reason to think that there is such a thing. As far as I'm concerned, the Oort cloud exists only in the mind of evolutionists. It's just a rescuing device that "saves" the evolutionist's view from evidence that would otherwise seem to refute it.

Likewise, the evolutionist could also explain away the other arguments above by appealing to a rescuing device. Perhaps there is some kind of unknown mechanism that has contaminated the diamonds and other samples, creating new C-14 in them — in which case such things can be very old after all. Perhaps there is some as-yet-undiscovered mechanism that produces new information in DNA. Perhaps nothing is truly irreducibly complex; it just seems that way due to our inability to imagine the stepwise process. The reason that mere evidences do not persuade people is that people can always invoke the *unknown*. This is why the above arguments do not really prove creation. *Any evidence* can be explained away by invoking a rescuing device.

Is a rescuing device unacceptable? Should we criticize the evolutionary astronomers for inventing a mere conjecture to rescue their

opinion of vast ages rather than simply accepting the evidence at face value? My response may surprise you. The answer is: no — a rescuing device is not *necessarily* wrong. The fact is, we all have rescuing devices. We all have a way of thinking about the world — a worldview. Our worldview contains our most strongly held convictions about how the world works: how it came to be, the nature of reality, the nature of truth, and how we should live. No matter what worldview we have, there will always be some evidence that does not seem to fit it — at least on the surface. And therefore, everyone (whether creationist or evolutionist) must occasionally invoke a rescuing device in order to maintain rationality in his or her worldview.

So I would not necessarily criticize the secular astronomers for inventing an Oort cloud (even though I don't believe in one). After all, I don't know for certain that there is *not* an Oort cloud either. The fact that we have no evidence for an Oort cloud does not prove that it does not exist. Absence of evidence is not the same as evidence of absence, so we cannot instantly dismiss evolutionary conjectures as necessarily impossible or irrational.

Nonetheless, a conjecture must not be *arbitrary*. If I simply asserted that "the core of Jupiter is made of green cheese" simply because no one has proven otherwise, this would be an unacceptable position. In logical reasoning, no one is allowed to be arbitrary — to just assume something without a good reason. After all, if we're just going to assume something with no reason, then we could equally well assume the exact opposite. Rational debate would be impossible if people simply assumed whatever they wanted and felt no need to provide a reason for their position. Therefore, people must have a reason for their rescuing device if it is to be considered rational.

As an example, consider the "distant starlight problem." This is the argument that the universe must be billions of years old since it apparently takes a very long time for light from the most distant galaxies to reach earth. How would a creationist respond to this claim? As of the writing of this book, there is not a definitive, verified solution to distant starlight. Therefore, creationists must invoke a rescuing device to explain distant starlight. Several good models have been proposed that can potentially solve this difficulty. But since none of them have been conclusively proved, they remain conjectures — rescuing devices — at this point in time.

Is this arbitrary? No, the creationist has a *reason* to believe that there is an answer to distant starlight. As a creationist, I am convinced that the Bible really is what it claims to be: the Word of God. As such, the Bible accurately describes the creation of the universe. My Christian worldview requires that God really did create in six days, just as He said He did. Therefore, I have a good reason to think that there really is a rational solution to distant starlight (possibly one of the existing models, or perhaps one that is as yet undiscovered). My reason for my rescuing device is that my worldview insists on one, and I have good reasons to know that my worldview is true.

So a rational person will appeal to his worldview as the *reason* for his rescuing devices. But then, of course, he must have good reasons for his worldview. Evolutionists (and other believers in vast ages) are perfectly justified in believing in an Oort cloud if, and only if, they appeal to their worldview. But appealing to one's worldview is only rational if one's worldview is rational. *The debate over origins therefore must ultimately boil down to a debate over competing worldviews.* As such, we must give some thought to the nature of worldviews and how to judge competing ones.

Worldviews

Most people today have not given much thought to their own worldview. In fact, many people do not even realize they have a worldview. Such people tend to think that all knowledge is acquired by unbiased observation of the evidence around us. This view is called "empiricism" and is itself a kind of worldview. We cannot help but have some beliefs about how the world works, how we attain knowledge, and how we should live. Even if we believe that we have no such beliefs — this is itself a belief. So there's no escaping it. A worldview is inevitable. A rational worldview is not.

Our worldview is a bit like mental glasses. It affects the way we view things. In the same way that a person wearing red glasses sees red everywhere, a person wearing "evolution" glasses sees evolution everywhere. The world is not really red everywhere, nor is there evolution everywhere, but glasses do affect our perception of the world and the conclusions we draw. We will find in this

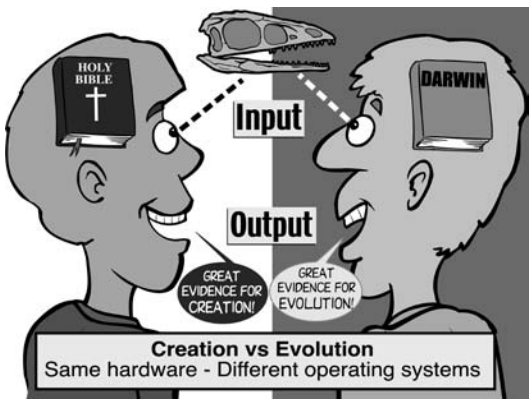
Worldview: a network of our most basic beliefs about reality in light of which all observations are interpreted

Our worldview controls the way we view the evidence.

book that the Bible is a bit like corrective lenses. Without "biblical glasses," the world appears fuzzy and unclear. But when our thinking is based on the Bible, the world snaps into focus: it makes sense.

Just as a person wearing red glasses perceives the world differently than a person wearing clear, prescription lenses, so evolutionists "see" the world differently than creationists. We have the same facts. But what we make of those facts is colored by our worldview. Thus, creationists and evolutionists interpret the same facts differently. This point cannot be overstated. Much of the frustration in arguments over origins stems from a failure to recognize that creationists and evolutionists *must* interpret the same data differently due to their different worldviews.

Many people do not want to accept the fact that all evidence must be interpreted in light of prior beliefs — a faith commitment of some kind. Many believe that evidence should be approached in a neutral and unbiased fashion — without any previous beliefs. However, this is impossible. For this view is *itself* a belief about how evidence should be interpreted. Moreover, in order for our observations of evidence to be meaningful, we would have to already believe that our senses are basically reliable. It would do no good to observe some piece of evidence if

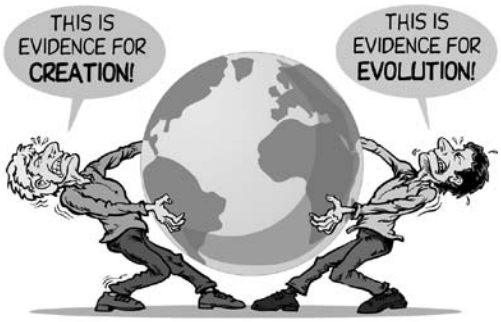


Creationists and evolutionists interpret the same evidence differently because they have different worldviews.

we did not believe our observations are real and reliable.

We cannot avoid wearing "mental glasses" — having a worldview — but it is crucial to wear the right glasses. In the same way that a person wearing red glasses might erroneously conclude that everything in the world is red, so a person with a wrong worldview will draw incorrect conclusions about the universe. But a correct worldview can prevent us from drawing the wrong conclusions and can improve our understanding of the world. For example, when I observe a magician cut a person in half, I conclude that it's a trick — no one was really cut in half, regardless of what I thought I saw. I draw this conclusion not because of the evidence, but because my worldview prevents me from drawing the wrong conclusion.

For example, suppose that your neighbor tells you that she saw a UFO last night.[6] Your worldview will immediately kick in and help you process and interpret this evidence. As your neighbor provides additional details, you will begin forming hypotheses based on your worldview. Perhaps she saw an alien spaceship. Perhaps it was a top secret government experimental aircraft. Maybe she had been drinking again last night. Or perhaps she merely saw the planet Venus. The conclusion you draw will be influenced not only by the evidence, but also by your general understanding of the universe. If you are convinced that extraterrestrial life does not exist, then clearly you will not draw the conclusion that your neighbor saw an alien spacecraft. Your worldview constrains and guides your interpretation of the evidence. This is true of every aspect of life. From UFOs or magic tricks to fossils and DNA,



our worldview tells us what to make of the evidence.

At this point, we have not yet made an argument that Christianity is the correct worldview — that it alone provides the correct way to interpret evidence in regard to origins (or any other issue). But by now it should at least be very clear that everyone interprets evidence in light of his or her worldview. And it is clear that creationists and evolutionists have *different* worldviews, and as a result, they interpret the same evidence differently. For this reason, evidence by itself will not cause a person to reconsider his worldview. Any scientific evidence can be interpreted in such a way as to fit into any given worldview.

A creationist looking at comets concludes that the solar system is young. An evolutionist looking at comets concludes that there must be an Oort cloud. A creationist examining the information in DNA concludes that there is a Creator. An evolutionist looking at the same information concludes that mutations or some unknown mechanism has generated such information. An evolutionist looking at the similarities in the genetic code of various organisms concludes that they must have a common ancestor. A creationist looking at those same similarities concludes that those organisms must have a common Creator.

We all interpret the facts in light of our worldview. Any evidence that seems to challenge our worldview can always be explained by invoking a rescuing device. Many debates on origins are not very effective because the opposing parties do not understand the nature of worldviews, evidence, and rescuing devices. Creationists can be frustrated that evolutionists are not persuaded by the evidence; but evolutionists feel the same way about creationists. Such frustration stems from a failure to consider the real issue: people always interpret evidence in a way that is compatible with their worldview. Thus, evidence by itself will never settle the debate.

It may seem that we have a "Mexican standoff." It may appear that there is no rational resolution to the issue of origins. After all, no matter how compelling the scientific evidence for creation may seem to

creationists, the evolutionists interpret the facts differently. They may even think that the evidence overwhelmingly supports their position. Since we always interpret evidence in light of our worldview, and since creationists and evolutionists have different worldviews, is there any way to rationally resolve the debate over origins? In the next chapter, we will see that there is. The ultimate proof of biblical creation must deal with worldviews. We will find in the next chapter that the biblical creation worldview must be true, because it is the only rational possibility.

Endnotes

1. These *confirm* Genesis in the sense that they are consistent with it; they show agreement. They do not "prove" Genesis in an ultimate sense.
2. Whether or not the recipient of the information does these things is not relevant to the definition. Only an *expected* action and *intended* purpose are required.
3. This is given as Theorem 28 in Dr. Werner Gitt's book *In the Beginning Was Information* (Green Forest, AR: Master Books, 2006), p. 107.
4. This is given as Theorem 15, Gitt, *In the Beginning Was Information*, p. 70 .
5. www.answersingenesis.org; see Don DeYoung, *Thousands not Billions* (Green Forest, AR: Master Books, 2005).
6. Thanks to Jay Lucas for suggesting this illustration.