

Dr. Young Addresses The Big Question

**Thomas W. Young, MD
October 6, 2011**

Introduction

Much has been written on the topic of origins. “How did the universe and life on this planet begin?” is indeed The Big Question. Scientists and other intellectuals have answers, but none of these people appears to have a corner on answers that are demonstrably truthful. Most scientists in academic settings believe and teach Darwinian or Neo-Darwinian Evolution and the Big Bang Theory. A few others invoke Intelligent Design as a scientific explanation. And even fewer scientists believe that science points to a creator God who formed “the heavens and the earth” as described in the book of Genesis in the Bible. So many theories, but what is the correct answer?

Ladies and gentlemen, in the next several chapters of this small treatise, I will do something that no one, to my knowledge, has ever claimed to do. I will prove to you beyond a reasonable doubt that the God of Abraham, Isaac and Jacob (hereafter referred to as “God”) created “the heavens and the earth” in *six literal days*.

The purpose of this small treatise is to demonstrate the power of the Forensic Scientific Method (FSM) and the Inferential Test for Expert Testimony (IT) for finding the truth behind critically important and even ancient past events.

This is not a religious treatise. I admit that I am a Christian and a Seventh-day Adventist. I profess to have faith in God, but I do not intend to use this document to convert you to religious faith. Having religious faith is no antidote to confusion related to The Big Question. The Seventh-day Adventist Church, for example, may have the doctrine of a literal six-day creation as one of its fundamental beliefs¹, but not all members of my faith community hold to that belief². This topic is an area of contention for people of all religious faiths.

I recognize that not everyone reading this will have read the prior seven articles in the Forensic Inference Series. It will not be necessary to read them now to understand my arguments. I will review the salient principles of deductive and inductive logic as I go along. I encourage the reader to understand fully the concepts in each chapter before proceeding to the next.

I hope you enjoy reading this as much as I have had pleasure in writing it.

Chapter 1: Deductive and Inductive Logic

In order to understand my argument, one needs to be familiar with some concepts of deductive and inductive logic.

Logic is "the study of methods for evaluating whether the premises of an argument adequately support its conclusion"³. If one claims to be "logical," he or she must then provide support for his or her opinions. Science involves studying phenomena in the universe and learning their causes. Science has to be logical in order to persuade others and to provide a basis for further learning and reasoning.

In logic, people offer arguments. An **argument** is a set of **statements** where some of the statements are intended to support another statement. Statements that are intended for support are **premises**, and the statement to be supported is the **conclusion**. Premises can be offered in any order in an argument, but the conclusion typically is at the end of a chain of premises.

A **statement** is a declarative sentence that is either true or false. Truth or falsehood are the only possible **truth values**. If a sentence is neither true or false (like a command: Get out of town!, or a question: What time is it?), then the sentence is not a statement.

A **deductive argument** is one in which the premises are intended to *guarantee* the conclusion--to make the conclusion *certain*. An **inductive argument** is one in which the premises are intended to make the conclusion *probable*, without guaranteeing truth.

Here is an example of a **deductive argument**, with two premises and a conclusion:

1. If one is added to one, then the sum is two.
2. One is added to one.
3. Therefore, the sum is two.

The conclusion is set off with the word, "therefore." If premise number 1 is true (which it is), and premise number 2 is true (which it is), then the conclusion can be guaranteed to be true (which it is).

Once again, the premises may be listed in any order. For example:

1. One is added to one.
2. If one is added to one, then the sum is two.
3. Therefore, the sum is two.

Here is an example of an **inductive argument**:

1. Most people like ice cream.
2. John is a person.
3. Therefore, John most likely likes ice cream.

There, of course, is no guarantee that John likes ice cream--only the probability of it.

In deductive logic, deductive arguments are either **valid** or **invalid**. In inductive logic, inductive arguments are either **strong** or **weak**. We will cover inductive arguments in a later chapter.

A valid argument is "one in which it is necessary that, if the premises are true, then the conclusion is true"³. The example above of a deductive argument--of adding one to one--is a valid argument. One way to guarantee if an argument is valid is to use a **valid argument form**. If an argument is in a valid argument form and the premises are true, then the conclusion is guaranteed to be true.

One such valid argument form is **modus ponens**. *Modus ponens* (MP) is:

1. If P, then Q.
2. P
3. Therefore, Q.

P and Q are **variables** that represent statements in English. The adding-one-to-one example is in the form of MP, and so is the example where the premises are re-ordered. P represents "one is added to one" and Q represents "the sum is two."

Note that premise 1 of MP is in the form of "If..., then..." This is a **conditional statement** or a "conditional." The portion of a conditional statement that follows the word, "if," is the **antecedent**, and the portion of a conditional statement that follows the word, "then," is the **consequent**. In **logical operator notation**, a conditional statement can be symbolized as $P \rightarrow Q$, with the operator of a conditional symbolized as an arrow. MP is symbolized as:

1. $P \rightarrow Q$
2. P
3. $\therefore Q$

Another famous valid argument form is **modus tollens** (MT). It is:

1. $P \rightarrow Q$ (If P, then Q)
2. $\sim Q$ (Not Q)
3. $\therefore \sim P$ (Therefore, not P)

The operator for a **negation** is a tilde (a "squiggle"). Here is an example of MT:

1. If one is added to one, then the sum is two.
2. The sum is 3 (not two).
3. Therefore, one is not added to one.

Now an argument may be valid, but it may not necessarily be a true or a **sound** argument. Consider this argument, in the form of MP:

1. If one is added to one, then the sum is three.
2. One is added to one.
3. Therefore, the sum is three.

The argument is valid because it is in a valid argument form, but it is not sound because the first premise is incorrect or false. If any premise (or at least one premise) is false, then the argument is **unsound** even though it is a valid argument.

Another way to make an argument **unsound** is to use an **invalid argument form**. Even if all the premises are true, the conclusion may be false if an invalid argument form is used. An argument where the conclusion can be false even though the premises are true is by definition an invalid argument. If the argument is invalid, it is also unsound, regardless of the truthfulness of the premises.

Consider the following argument:

1. If one is added to one, then the sum is two.
2. The sum is two.
3. Therefore, one is added to one.

The argument is both invalid and unsound. There are many ways to get the sum of two besides adding one to one. 1.5 could be added to 0.5. Negative 98 could be added to 100. .0001 could be added to 1.9999. The combinations are endless and only limited by the imagination.

The following represents the famous invalid argument form known as **affirming the consequent** (remember, P is the antecedent and Q is the consequent in a conditional statement):

1. $P \rightarrow Q$
2. Q
3. ~~$\therefore P$~~

I put a single line through #3 to indicate that it is an improper conclusion. **One cannot deductively determine the antecedent from the consequent. To do so is both logically invalid and unsound.**

We have reached the end of Chapter 1. Please read the above carefully and make sure you understand it because you will need to understand these concepts to understand what I will tell you next.

Also, before beginning Chapter 2, please carefully study the photograph of the damaged car. After carefully studying it, write down on a piece of paper your answer for how the car got into this condition. Think hard now, and good luck!



Chapter 2: The Scientific Method

Up to this point, we have covered rudiments of deductive logic, particularly forms of logic that involve *conditional statements*. We have covered two valid argument forms that involve conditional statements--*modus ponens* (MP) and *modus tollens* (MT) and one invalid argument form (*affirming the consequent*).

Next, I will discuss the Scientific Method, and how that looks in the context of logic. But before I go on with that...

How did you do on the homework assignment I gave you in Chapter 1?

There is no need to respond to that question. I already know the answer: you got it wrong.

I have shown this photograph to many scientific experts, including forensic engineers and other forensic scientists. "Tell me what happened to result in this damage," I asked them. All of them gave wrong answers. Several speculated about some form of traffic accident, involving collisions with another car or another object on or beside the road. Others said something heavy, like a tree, fell on the hood of the car. Some speculated about crashing against a low-lying abutment. All were wrong. If they did not do well with this question, I do not believe you did any better.

When a friend of mine sent me this photograph, saying that her husband was in a horrible accident, I did not try to determine what happened by looking at the photograph. I simply asked her a two-word question, "What happened?"

After years of *affirming the consequent*--of trying to determine antecedent past events by looking at consequent physical evidence--I have come to realize that it is an exercise in futility. It does not matter how much of an expert someone is, it is **impossible** to look at physical evidence and determine from it the complex sequence of events that occurred in the past that led to the physical evidence. Doing so would be like pulling a tiny needle from an infinitely large haystack!

She responded to my question by saying that her husband was driving south on an interstate highway when a northbound tractor-trailer lost two wheels from lug nut failure. One of wheels flew rapidly northward to the southbound lanes, like a bullet from a gun. The rapid motion of this wheel of course would be predicted by the Newtonian concept of conservation of momentum--the wheel would fly northward from the truck at roughly the same speed as the truck once it separated from the truck. The heavy and rapidly flying spinning wheel collided with the hood of my friend's car with great energy, and then it bounced over the occupant compartment. My friend's life was spared, but his engine was destroyed.

Look at the photograph. Does the story fit?

Now, on to the Scientific Method. The Scientific Method is defined as "a method of procedure that has characterized natural science since the 17th century, consisting in systematic observation, measurement, and experiment, and the formulation, testing, and modification of hypotheses"⁴. Essentially, the Scientific Method is about developing *truthful conditional statements*. Such statements of cause and effect are what science is made of. These statements are the way we understand phenomena in our universe.

The Scientific Method is essentially the hypothetico-deductive-inductive method. It involves 1) observation, 2) hypothesis, 3) prediction, 4) experimentation or controlled observation, and 5) more of the same.

At first, a scientist *observes* some things that are startling. Let us call the items he observes "P" and "Q." The scientist then asks, "I wonder if 'P' causes 'Q'?" He or she then develops a *hypothesis* to explain "P" causing "Q" ($P \rightarrow Q$).

Now a hypothesis cannot stand by itself without testing. It is simply a "hunch" that needs to be tested. The scientist then makes a *prediction*. "If P does lead to Q, then an experiment designed in a certain way will so demonstrate." Then the scientist goes about designing this experiment. In such a design, the scientist *manipulates P*. One way of manipulating P is with experimental and control groups (items with P and the same items without P) in order to isolate out P as the explanation for Q. In such an experiment, the experimental group with P will lead to Q while the control group without P will not. This experimental method is the *method of difference*, one of several experimental methods described by logician, John Stuart Mills ("Mill's Methods").

If Q does not result as predicted, then $P \rightarrow Q$ is *falsified* (shown to be not true). This allows an elimination of P as an explanation for Q in a fashion that is guaranteed because of MT:

1. If P, then Q.
2. Not Q.
3. Therefore, not P.

The hypothesis is eliminated so that other hypotheses can be considered.

If Q is the result, it does not mean that P is automatically the cause. To come to that conclusion would be logically invalid. It would be affirming the consequent:

1. If P, then Q.
2. Q.
3. ~~Therefore, P~~

A scientific statement ($P \rightarrow Q$) cannot be proven deductively but it can be falsified deductively.

So how does one establish a scientific concept if it cannot be proven deductively? Scientists have to take hypotheses that have resisted falsification and establish them *inductively* (show that they are *probably* true). One way is by *induction by enumeration*. $P \rightarrow Q$ is tested numerous times under varying conditions. Other scientists are given the opportunity to falsify the hypothesis by experimentation and controlled observation. If they are unsuccessful in falsifying it under a wide variety of conditions and circumstances, the odds are increased that the hypothesis is true. In other words, the higher the number of *confirming instances*, the more likely the hypothesis is true.

Furthermore, one can make an *argument by authority*. If one's scientific peers who are all experts agree that the hypothesis is not falsified, then the study is published in a peer-reviewed journal, giving the world indication that some experts (not all experts) are in agreement. This can become a *strong argument* (a highly probable argument) for truthfulness if many, many experts agree.

Another inductive method is the argument of *explanatory power*. How well does the hypothesis explain other phenomena? For example, no one has ever seen atoms or molecules. No one has ever seen protons, electrons, or neutrons. But the concepts embodied in these "models" that have never been seen possess great explanatory power to explain a great many things. Similarly, no one has ever seen gravity or force, but these items--these concepts--can be measured and characterized in the physical world as phenomena. This is because over time, these concepts possess great explanatory power for many phenomena. Still, in spite of such explanatory power, none of these items can be proven in the deductive sense but only deemed probable in the inductive sense--even highly probable.

Now, ladies and gentlemen, here is the great news flash...wait for it...wait for it...wait for it...

The Scientific Method does not work for past events!

First of all, I need to make a few comments about the past.

Past events no longer exist in a real and tangible sense. Past events are abstract concepts. The only items that exist are what is currently present; however, if the past can be characterized to "exist" in any form, it is in the form of 1) memory or 2) record. We have the capacity to remember what happened. We also have the capacity to record what happened by writing it down (or typing it on paper or in a computer), by audio and video recordings, and by images. If there was no one to remember or record certain past events, those past events cannot be known.

Furthermore, the past is complex. Even the past concerning one person or item is complex. Over time, unique phenomena occur to that person or item that are never repeated in *exactly* the same way. Then consider the past involving multiple people, multiple objects, multiple events throughout the entire universe--events that were both observable and not observable. The past is exceedingly complex and beyond the reach

of the human imagination in its exceeding complexity. We do not come close to knowing all past events.

Here is why the Scientific Method does not work for past events.

The past is not observable by scientists living in the present. Only people who were present in a certain place at a certain time and who were sufficiently sentient to observe, remember and record are the only ones who observed the past event. The scientific method relies on scientists to do the observing.

The past cannot be predicted. Prediction is an activity occurring in the present that looks to the future. Determining what is past through any form of reasoning is simply relying on Q to surmise P--in other words, affirming the consequent. Affirming the consequent does not make it past the hypothesis stage because it is deductively invalid and unsound. The photograph of my friend's car demonstrated just how poorly we do at affirming the consequent for past events.

Furthermore, one cannot perform experiments on the past. Experimentation involves *manipulating P*, and scientists cannot manipulate the past, although some may try in vain to "rewrite history"--to revise the past in the minds of others!

The Scientific Method even falls down in the inductive sense. An argument by enumeration cannot be used because past events are unique--occurring only one time. An argument by authority also holds no water. The only somewhat-real authorities on past events are historians, not scientists, and the historians have to rely on the memories and preserved records of others who were alive and present when the past event occurred. Scientists who all agree on past events they have never seen offer an *ad verecundiam* argument (appeal to false authority) which is a fallacy. One cannot claim to be an expert on a past event as a scientist if he or she was not there to observe it, measure it or manipulate it for purposes of proof.

Past events surmised by scientists most of the time have poor explanatory power. In my forensic practice, I have found that witnesses provide past-event explanations for physical evidence that have greater explanatory power than the scenarios invented by scientists. That is why these days many like the explanatory power of what I have to say and why people seek out my services. It is not because I am so smart; it is because I listen to witnesses with an open mind rather than try to invent something out of physical evidence.

So much for the Scientific Method. In the next chapter, I will tell you about the Forensic Scientific Method--a deductively valid approach to learning the truth about the past--and the Inferential Test--a statement that is always true. Both can be used effectively to answer The Big Question.

Chapter 3: The Forensic Scientific Method and the Inferential Test

In the previous chapter, I demonstrated that one cannot reliably determine past events from physical evidence with the Scientific Method. Unfortunately, this has not stopped modern scientists from claiming that they can!

Attempts to apply the Scientific Method to past events regarding our origins began in the 18th and 19th centuries. Charles Darwin was not the only one who tried. There were also several others. Speculations have been offered by such "luminaries" as Jean-Baptiste Lamarck, Georges Cuvier (even though he was a "creationist"), Erasmus Darwin, James Hutton, Robert Chambers, Charles Lyell, Alfred Wallace, and Thomas Huxley. Many of these were scientists who lived during the Victorian Era of nineteenth-century England. Although the speculations of these men were capable of being falsified and actually have been falsified in many ways, no one seems to want to talk about that. Instead, their untested hypotheses (at least, hypotheses not tested by them) are repeated over and over again and have become the mainstream in thinking among modern scientists and educators. These untested hypotheses have become the new dogma. Much of modern science flowed from the Enlightenment, when thinkers, philosophers and other intellectuals rejected dogma foisted upon the masses by the Church. Now, the dogma of the Church has been replaced in the minds of many intellectuals by the dogma of Science, so-called. It is now the orthodoxy for the secular man and woman.

But this orthodoxy is nothing more than a mythology--a collection of speculations by people who were not present to witness what happened. It has become the fashionable way to explain the cosmos. In the 20th century, we added the Big Bang Theory--a simplistic explanation for a very, very complex universe. When scientists invent hypotheses, they like to assume the very simplest of explanations with the fewest assumptions, thanks to William of Ockham (Ockham's razor). Their assumptions eliminate the need for God as a creator. This assumption of "no God" by scientists, of course, is without any support--scientific or otherwise. Such an assumption flies in the face of the exceeding complexity of life and the universe, and the existence and maintenance of both.

To maintain this mythology, scientists who claim expertise in these topics offer experimental and observational studies filled with logical fallacies. I will cover more of this at a later time.

But so what? What is the real harm here?

A few people may be harmed. In order to get a job, keep a job, or advance in a job, biological and physical scientists may be forced to espouse the dogma or at least keep their beliefs on the "down low." Other scientists and students who were believers may find that they make a shipwreck of their faith once they accept the mythology. Still, one can make an argument that what happened a long time ago has little impact on our lives

today. Can any scientist be held to account for being wrong about what happened in the past--particularly when no witness is currently living to contradict him or her? Except for a few, is anyone losing a job because of scientists being wrong about past events? Is anyone losing his or her life? Is anyone being thrown in jail? Is anyone's career and reputation being destroyed?

The answer to all those questions in the paragraph above--believe it or not--is YES!!!

Paleontologists, geologists, and evolutionary biologists are not the only scientists who talk about the past. Forensic scientists also apply science to past events. Currently, forensic science is held in great disrepute. In 2009, a monograph published by the National Academy of Sciences, entitled, "Strengthening Forensic Science in the United States," has "flamed" the forensic sciences--the application of science to legal matters--as being "not scientific enough"⁵. This is because recently DNA technology has falsified a great number of opinions offered in the courtroom by forensic pathologists and other scientists, thanks to the work of the Innocence Project. Also, Dr. Charles Smith in Canada, who for 24 years offered clear and convincing opinions that put many in jail, had his career destroyed when he was found to be horribly mistaken on many child death cases.⁶

I did not know Dr. Smith personally but I had seen him at professional meetings year after year. He did not look like the devil incarnate to me but simply a mild-mannered, Clark-Kent type of guy who got caught after affirming the consequent for past events over and over again. He is a victim of Sherlock Holmes.

Holmes is a fictional detective written about by another scientist and physician who lived during the Victorian Era of England, Sir Arthur Conan Doyle. Holmes claimed to get all the answers by "reasoning backwards"⁷. He would look at clues from the crime scene and weave a story from those clues to explain what happened to cause those clues. Essentially, he affirmed the consequent for past events. Conan Doyle, when he wrote Sherlock Holmes short stories and novels, was serious: he thought he offered to the world the application of science to crime solving. What he did instead was offer what other Victorian era scientists, including Charles Darwin, had been espousing for many years. The significant difference, however, between evolutionary biology and crime solving is the difference between the remote past and the recent past: there is still enough evidence around in a recent past case eventually to destroy the unwary scientist! Although no one really cares what Darwinian biologists have to say, forensic pathologists are examined through a very public lens by the media. The public holds the forensic pathologist accountable for wrong interpretations about past events--unlike other scientists.

Our failure as forensic pathologists has always disturbed me. I remember conferences where a room full of pathologists would all come to different conclusions after looking at the same crime scene and the same autopsy findings. If scientists perform this poorly with their science, how was it that we ever put a man on the moon? I began to consider the questions, "How do I know when I really know?" and "How do I know when I do not

know?" After all, pathologists are supposed to offer opinions in court "to a reasonable degree of medical certainty." When am I certain, and when am I just guessing?

My thinking on this topic became even more intense when I found myself after 2007 consulting on cases where forensic pathologists and child abuse pediatricians were inferring improperly, leading to false accusations of child abuse, strangulation, and other crimes. It gradually occurred to me that the major reason for failure was--as I have already stated--that the Scientific Method that we have all come to know, love and use does not work for past events! My thinking developed over time, and the articles on my website reflect my growing understanding.⁸

If the Scientific Method does not work for past events, what scientific method will work?

Elementary, my dear reader. Consider the **Forensic Scientific Method (FSM)**. It is summarized as follows:

1. Acquisition of primary witness and other anamnestic evidence
2. Anticipation of future questions
3. Acquisition of physical evidence
4. Comparison of consistency of alleged events (hypothesis) with physical findings, obtaining additional data as needed
5. Assessment only to a reasonable degree of scientific certainty, recognizing the limitations of science

The following is an explanation in detail of each step from the perspective of a forensic pathologist:

1. *Acquisition of primary witness and other anamnestic evidence*: Rather than try to use Q to surmise P, the scientist needs to learn P--to learn in detail the past events as alleged by primary eyewitnesses. The information requires primary accounts, not hearsay. The scientist needs to obtain the information from direct witness statements if possible rather than through some other filter. The word, "anamnestic," means "memory". Such evidence includes documentation from nurses, paramedics, emergency department doctors, and other first and subsequent responders. This should allow a continuous timeline of events to be constructed, all from primary witness accounts.
2. *Anticipation of future questions*: Anticipating what questions will be asked is important. The scientist needs to know the issues and the likely questions to be asked of him or her at a later date in order to make the proper inquiries and a proper collection of physical evidence. One example of this is recognizing a potential homicide so that evidence at the crime scene and the autopsy can be preserved

properly. Failure to preserve evidence properly may lead to problems in the courtroom when defense attorneys ask questions.

3. *Acquisition of physical evidence*: For a pathologist, this would include an autopsy, imaging (radiographs, computerized tomography scans), and specimens for laboratory testing.
4. *Comparison of consistency of alleged events (hypothesis) with physical findings, obtaining additional data as needed*: Note that the hypothesis is not generated by the imagination of the scientist (as with the usual Scientific Method). The hypothesis is derived from the accounts of the eyewitnesses. "P" as alleged is the hypothesis to be tested. Since "What happened?" and "Who is responsible for what happened?" are the important questions to be considered in a past event case, the hypothesis is the answer to those two questions as indicated through witness accounts. The comparison of anamnestic with physical evidence involves MP and MT in the following ways:

MP:

1. P is alleged.
2. If P, then Q (Appropriate conditional statements of science are discerned from P).
3. Therefore, Q (P as alleged by a witness or witnesses is sufficient to explain the physical evidence according to science, and I can state that to a reasonable degree of medical or scientific certainty because it is a deductive inference which can guarantee certainty).

MT:

1. P is alleged.
2. If P, then Q (Appropriate conditional statements of science are discerned from P).
3. Not Q (The physical evidence is not what would be anticipated scientifically from P).
4. Therefore, not P (P as alleged by a witness or witnesses is negated or falsified by the physical evidence according to science, and I can state that to a reasonable degree of medical or scientific certainty because it is a deductive inference which can guarantee certainty).

The classic statement of MT does not include "P is alleged;" however, applying the appropriate conditional statement ($P \rightarrow Q$) would not be possible without P being alleged first. This demonstrates the importance of knowing P for a forensic analysis as it is alleged.

Also, it is important to obtain additional data if it is needed. Just because something is initially falsified does not mean a scientist has learned enough or a mistake was not made. Perhaps in the laboratory, for example, an instrument was improperly calibrated, a solution improperly constituted, or a finding improperly interpreted. It is important to try not to commit the *fallacy of incomplete evidence* by making sure to follow up on all leads. Witnesses may lie for all kinds of reasons, so it is important to confront witnesses with additional information to see how they may respond to it.

5. *Assessment only to a reasonable degree of scientific certainty, recognizing the limitations of science:* The "limitations of science" can be summarized by the **Inferential Test for Expert Testimony:**

One can be reasonably certain if witness accounts of the past are consistent or not consistent with physical evidence in the present, but one cannot reliably surmise past events from physical evidence unless there is only one plausible explanation for that evidence.

In other words, one can claim reasonable certainty for a scientific opinion when MP or MT is used with witness accounts or when the circumstantial evidence (physical evidence without sufficient witness accounts) has only one plausible explanation. On the other hand, we cannot claim reasonable certainty if we affirm the consequent by "surmising past events from physical evidence."

One more point. A witness account may be "sufficient to explain" the physical evidence through MP, but it does not mean that the witness account or accounts are true. Witness accounts may be false and still be "sufficient to explain" the physical evidence. For example, let us say a man at autopsy has hardening and blockage of the coronary arteries (the arteries supplying blood to the heart muscle). One witness says he saw the man clutch his chest and die suddenly without provocation. Another witness says a thief pulled a gun on the man without touching him, causing the man to clutch his chest and die suddenly. Both accounts are consistent with (sufficient to explain) the physical evidence at autopsy, but one account is false and one account is true. One describes a homicide (even without touching) and the other a natural death. We just cannot tell from the physical evidence which account is true, even though both accounts are consistent.

This document [<http://www.heartlandforensic.com/writing/forensic-inference/the-inferential-test-is-always-true-think-of-it-as-a-law>] demonstrates that the Inferential Test is a theorem that is always true⁹. Such a demonstration using deductive logic is even better than peer review!

I will address The Big Question in the next two chapters using the FSM and the IT. The Big Question in truth is not just an issue for natural and physical scientists. It is a **forensic scientific issue** because it involves past events. How would I as a forensic scientist address The Big Question? Keep reading!

Chapter 4: Application of the Forensic Scientific Method and the Inferential Test, Part 1

In the last chapter, I told you I would address "The Big Question" as a forensic scientist using the FSM (Forensic Scientific Method) and the IT (Inferential Test for Expert Testimony). The IT is always true; I demonstrated that in an article on my website entitled, "The Inferential Test is Always True. Think of it as a Law"⁹. [<http://www.heartlandforensic.com/writing/forensic-inference/the-inferential-test-is-always-true-think-of-it-as-a-law>]. You may not understand all the logic, the logical operator notation, and the truth tables, but this is not necessary to understand my point. My point is that *the IT is a necessary truth and is true under all circumstances*. I have demonstrated that fact through deductive logic. This should add to your confidence when it is used (it certainly adds to mine).

Once again, the Inferential Test:

One can be reasonably certain if witness accounts of the past are consistent or not consistent with physical evidence in the present, but one cannot reliably surmise past events from physical evidence unless there is only one plausible explanation for that evidence.

First of all--for the sake of argument--let us assume that we are not aware of any sufficient witness accounts regarding the creation of the heavens and the earth. In that situation, we look at the question as all scientists up to this point (except for me) have chosen to look at it. I say this because scientists--for some reason and it is not a good reason--choose to believe that there is no sufficient account of past events that addresses this issue. They choose to tie one arm behind their backs, so to speak. In that situation, we would have to rely on the exception in the second half of the IT--following the word, "unless"--which allows us to be certain from circumstantial evidence only (circumstantial evidence is indirect evidence without sufficient witness accounts). Even so, we could determine with certainty through circumstantial evidence that God (a name we assign to an intelligent and powerful creator and sustainer) *provides the only plausible explanation for the creation and the sustenance of the heavens and the earth*.

To some degree, this is the conclusion of an argument offered by scientists who espouse Intelligent Design. In my opinion, their argument does not go far enough in several respects. First of all, the argument ignores witness accounts that exist for these past events (to be covered in the next chapter). Secondly, not only does there have to be intelligence to design the system called "the heavens and the earth" but there also has to be *power* introduced into the system not only to *create* the system but also to *order and sustain* it. This is an ongoing and vitally important activity that is a present reality, not just a past event. That power is delivered through certain vehicles (the sun providing heat and light, for example) in certain ways that follow "scientific laws." "Scientific laws" are reliable and truthful conditional statements of cause and effect. Such "laws" are--in and of themselves--another evidence of an intelligent and powerful creator and sustainer.

The IT is practical as well as logical. The use of the exception means that in the absence of witness accounts, all other plausible explanations have been considered and rejected. Ordinarily, this is a tough standard to meet because circumstantial evidence cases are hard to argue in court, but I would challenge anyone to falsify the exception by providing another plausible explanation for the intricate creation and sustenance of the heavens and the earth.

The IT as expressed in logical operator notation--as you may have noticed from the previous link⁹--uses a *biconditional* operator (double arrow) for the exception: $Q \leftrightarrow P$.

This is not the same operation as a *conditional* ($P \rightarrow Q$) which utilizes a single arrow. $Q \leftrightarrow P$ in English means "Q *if and only if* P." Another way to state it is "Q is both a *necessary and sufficient condition* for P."

Consider the following examples as a way to understand "sufficient" and "necessary." Drowning may be a sufficient condition for death but not a necessary one: death can also be caused by other means, i.e. stabbing, shooting, heart attack, etc. On the other hand, water is a necessary condition for the life of a plant (life only if water) but it is not sufficient. Other items are necessary for the life of a plant, such as sunlight, soil, etc. Now there are a very few situations where something is both a necessary and sufficient condition for something else, such as:

God created the heavens and the earth¹⁰ *if and only if* all things are possible with God¹¹.

If all things are possible with God, then there is no reason to doubt that God can create the heavens and the earth; and if God can create the heavens and the earth, there is no reason to doubt that all things are possible with God. If one part is true, the other part is true; and if one part is false (God *cannot* create the heavens and the earth), then the other part is false (With God, all things are *not* possible). In a biconditional, one part cannot be true and the other false, and vice versa. This allows *only one plausible explanation* because two plausible explanations--one being true and the other false--cannot both exist if the biconditional is true.

What if one does not want to believe in an intelligent and powerful creator and sustainer? Consider the following:

1. Assume that there is no God.
2. If there is no God, then the universe came to be by the Big Bang scenario (that is why the scenario was invented--to explain the origin of the universe without God causing it).
3. If the universe came to be by the Big Bang scenario, then the laws of physics were suspended (How does nothing become so dense that it becomes something that explodes?).
4. If the laws of physics were suspended, then a miracle was performed.

5. If a miracle was performed, then there is a God (A "miracle" is "a surprising and welcome event that is not explicable by natural or scientific laws and is therefore considered to be the work of a divine agency"⁴).
- ∴ There is a God.

What I just offered is an indirect proof for the existence of God using *reductio ad absurdum*. If one is asked to assume something and that assumption leads to a contradiction, then the very opposite of what was assumed is true. A *contradiction* is a statement that is false in all circumstances. Consider the statement: "There is a God and there is no God." This is a contradiction because God either exists or he does not--He cannot be both at the same time. That is like saying, "I am dead and alive at the same time." The statement by necessity is false. Since a contradiction is always false, the negation of a contradiction (in logical operator notation: $\sim(G \cdot \sim G)$ or "It is not true that God both exists and does not exist at the same time") is always true, according to the *law of noncontradiction*. The law of noncontradiction allows *reductio ad absurdum* to be used in an indirect proof for the existence of God and for many other arguments.

Using logical operator notation in a proof, the argument above is demonstrated deductively to be valid. For reference, $\sim G$ symbolizes the statement, "There is no God," and G symbolizes the opposite, "There is a God." B symbolizes the statement, "The universe came to be by the Big Bang scenario." $\sim L$ symbolizes the statement, "The laws of physics were suspended." M symbolizes the statement, "A miracle was performed."

- | | |
|---------------------------|--|
| 1. $\sim G$ | Assume (for <i>reductio ad absurdum</i>). The tilde means "not." |
| 2. $\sim G \rightarrow B$ | Restatement of line 2 above. |
| 3. $B \rightarrow \sim L$ | Restatement of line 3 above. |
| 4. $\sim L \rightarrow M$ | Restatement of line 4 above. |
| 5. $M \rightarrow G$ | Restatement of line 5 above. |
| 6. $\sim G \rightarrow G$ | Hypothetical syllogism string (If 2 then 3; if 3 then 4; if 4 then 5; therefore, if 2 then 5). |
| 7. G | MP applied to lines 1 and 6. |
| 8. $G \cdot \sim G$ | Conjunction of lines 1 and 7 (G and not G , which is an absurdity). |
| 9. ∴ G | Lines 1-8, <i>reductio ad absurdum</i> (since statements 1-8 lead to a contradiction, the opposite of what was initially assumed in line 1 must be true) |

Steps 6 through 9 are additional steps in a proof to show the validity of the conclusion using well-known theorems--similar to the proofs we used in 10th grade Geometry class. If the premises in lines 2 through 5 are true (assuming line 1 to be true), then the conclusion is true.

What if one wants to call himself a "theistic evolutionist"--one who believes in both God and Darwinism? That is also absurd. Consider the following.

1. If one believes Theistic Evolution is correct, then one accepts both the existence of God and the truth of Darwinian (or Neo-Darwinian) Evolution.
 2. If one believes Darwinian (or Neo-Darwinian) Evolution to be true, then one accepts the non-existence of God (That was the whole point of the scenario when Darwin first proposed it: to explain the existence of life as we know it without the existence of God).
- ∴ Theistic Evolution is not correct.

Consider the following proof using *reductio ad absurdum*. For reference, T symbolizes the statement, "One believes Theistic Evolution is correct." G symbolizes, "God exists." E symbolizes the statement, "Darwinian (or Neo-Darwinian) Evolution is true."

- | | |
|--------------------------------|---|
| 1. $T \rightarrow (G \cdot E)$ | Restatement of 1 in logical operator notation |
| 2. $E \rightarrow \sim G$ | Restatement of 2 in logical operator notation |
| 3. T | Assume that Theistic Evolution is true for <i>reductio ad absurdum</i> argument |
| 4. $G \cdot E$ | MP applied to lines 1 and 3. |
| 5. E | Simplification of line 4 (If a conjunction of statements is true, then one of those statements is also true) |
| 6. $\sim G$ | MP applied to lines 2 and 5 |
| 7. G | Simplification of line 4 (see above) |
| 8. $G \cdot \sim G$ | Conjunction of lines 6 and 7 (if G is true and not G is true, then G and not G are true. This is an absurdity.) |
| 9. ∴ $\sim T$ | Lines 3 - 8, <i>reductio ad absurdum</i> |

I hope I have not thoroughly confused you by this point. Playing around with the logic is fun for me but perhaps not for you. Once again, the argument is shown to be valid, so if premises 1 and 2 are true, then the conclusion is also true.

As interesting as using the second half of the IT is by itself, it is not nearly as interesting nor is the argument nearly as compelling as when the first half of the IT is applied. What would the analysis look like if ancient witness accounts were compared to present-day physical and empirical evidence for consistency and inconsistency? There is more to come in Part 2. Keep reading.

Chapter 5: Application of the Forensic Scientific Method and the Inferential Test, Part 2

Now, on to the first part of the inferential test, which states:

One can be reasonably certain if witness accounts of the past are consistent or not consistent with physical evidence in the present...

What "witness accounts of the past" address the question of God creating the heavens and the earth in six literal days?

Take a look at this link on the internet¹². [http://www.hanefesh.com/edu/How_old_Torah.htm] Please read it carefully.

This is an argument offered by a Jewish scholar for the antiquity of the Torah, the first five books of the Hebrew Bible. The author offers a chain of deductive arguments extending back into history. One can discern, for example, the valid deductive argument form, *modus tollens* (MT), for one of the arguments:

1. ($P \rightarrow Q$) If the Torah (the first five books of the Old Testament) had been written during the era of the Judges, then they would not have included a law not to attack the nations of Ammon and Moab (since Israel under the Judges attacked Ammon and Moab frequently).
2. ($\sim Q$) A law not to attack Ammon and Moab exists in Deuteronomy 2:19.
3. ($\therefore \sim P$) Therefore, the claim that the Torah was written during the era of the Judges is false (it was written before that).

There are also other evidences that these five books are ancient accounts rather than fiction written at a much later date. I can think of three.

1. *Genealogical lists and census figures.* Genealogies and census results such as the ones listed in the fifth, tenth and eleventh chapters of the book of Genesis and chapters one through four of the book of Numbers are lists that would be meaningful and of interest to a reader of that time, just as our own genealogies and specific enumerations regarding ourselves and our families would be meaningful to us. They would not be as meaningful to a casual reader living during a later time. A work of fiction written at a much later date would not be expected to include such lists.
2. *Detailed rules and regulations for an ancient society living in a desert.* The very specific laws detailed in the books of Exodus, Leviticus, Numbers and Deuteronomy contain information that would be meaningful only to people who were alive during the wilderness wandering. A work of fiction at a much later date would not be expected to contain such detailed regulations.
3. *Unflattering accounts.* Many of the accounts offered in these five books are tragic and demonstrate a baseness and a cruelty of the "protagonists." A work of fiction or

rewritten history from a later date would be expected to paint a picture that is much more positive, flattering, or nationalistic. The candor of these accounts speaks to the authenticity of the Torah writings as historical documents written at or near the time in question.

On the basis of arguments such as these, it is reasonable for my analysis to accept as a witness account these five books that according to Jewish scholarship and tradition were written by Moses, a man who lived during much of the time covered by the books. If you can think of an eyewitness account germane to this topic that can be demonstrated to be older than these books, please let me know (Good luck!).

Moses wrote at the beginning of the book of Genesis, "In the beginning, God created the heavens and the earth." Moses was not alive to witness that event directly, but as we will see shortly, he did not need to witness that event directly.

On Mount Sinai, Moses allegedly met the Creator Himself. He told Moses that the children of Israel were to:

"Remember the Sabbath day, to keep it holy"¹³.

Why were they to do this?

"For in six days, the LORD created the heavens and the earth, the sea, and all that is in them"¹⁴.

This was a direct reference to the Sabbath--a day of "rest" on the seventh day--which was established by God Himself following His alleged creative "work" that took place during the previous six days¹⁵. It was intended by Him to be a memorial in time of His creative work.

But were these six days actually "literal" days, or did they represent eons of time figuratively represented as "days" in a fashion hypothesized by some theistic evolutionists?

Prior to the giving of that commandment directly to Moses on Mount Sinai, God instituted a "feeding plan"¹⁶ for the young nation of Israel--an entire nation that had been miraculously rescued from captivity by crossing a parted Red Sea¹⁷--to sustain them in the desert. During their wanderings for 40 years¹⁸, manna miraculously fell from the sky for the first six literal days, but it did not fall on the seventh literal day because it was the Sabbath day. Twice as much manna would fall on the sixth day, the day of preparation for the Sabbath. This was a consistent reminder to numerous witnesses for 40 years that the heavens and the earth were created in six literal days.

How many witnesses to these events were there?

In the beginning of the book of Numbers, there is a census of the men capable of fighting in battle, 20 years of age and older, in each of the twelve tribes of Israel^{19,20}. The census results for each tribe were:

Reuben: 46,500
Simeon: 59,300
Gad: 45,650
Judah: 74,600
Issachar: 54,400
Zebulun: 57,400
Ephraim: 40,500
Manasseh: 32,200
Benjamin: 35,400
Dan: 62,700
Asher: 41,500
Naphtali: 53,400
(Levites were not numbered)
Total number: 603,550²¹

These fighting men, which do not include the priestly tribe of Levi, had wives and children, so the total number of people wandering in the desert at any one time could be estimated at 2 1/2 million people. Furthermore, since an older generation died out and a new generation of men and women came on the scene during the 40 years of wandering in the desert²², the number of new witnesses increased accordingly. Consider a routine exposure to manna for 6 days / no manna for 1 day occurring continually for 40 years. I estimate the number of witness-days (number of all witnesses multiplied by the number of days the events were witnessed) at 7.28×10^{10} . This is a very, very high number.

This is not simply a "witness account." This is a **history**. A history is when there are so many witnesses to the same events that the facts of what happened are unquestioned among a group of people who share this history--such as the Jews. The history is passed down from generation to generation in the forms of memory and record.

Witness accounts of this nature would provide powerful evidence in a courtroom, where usually it only takes a few witnesses to allow conviction beyond a reasonable doubt. Imagine millions of witnesses taking the witness stand! Conspiracy theories are not supported by millions of people over multiple generations. I will discuss that in detail later.

It is also important to note that the existence of a Jewish race is a miracle from God. Jews are descendants of their patriarch, Israel (formerly known as Jacob). Each of the tribes listed above were sons of Israel. They were enslaved in Egypt, and the rescue of the entire nation from slavery occurred through a miraculous crossing of a parted Red Sea. Furthermore, this large number of people with a population similar to a large metropolitan area in the United States was sustained miraculously in a harsh desert

climate. Even during their wanderings for 40 years (the reason for which was dictated by God Himself²²), they not only were miraculously fed but their health and clothing were also miraculously maintained in good condition in spite of the rigors of desert life²³. If these miraculous events had not occurred, there would be no such group of people as Jews.

Does the account in the books of Moses--a record of history among the Jews and many other people--sufficiently explain physical and empirical evidence in the present? They do, in my opinion made to a reasonable degree of forensic scientific certainty. Consider the following consequents, with their antecedents referred to parenthetically:

1. Light and heat energy are needed to keep water as both a gas in the air and a liquid on the surface; and light, air, both forms of water, and soil are necessary for life (Creation week--first and second day items and "dry land" precede the plants and animals²⁴).
2. Plant life needs diurnal light and dark cycles for photosynthesis (Creation week--light and dark cycles precede the plants²⁴).
3. Metabolism in animals requires plant life to create oxygen and carbohydrates via photosynthesis (Creation week--plants precede the animals²⁴).
4. The existing concept of time in cycles of days, months, seasons and years (Creation week--sun and moon created²⁴).
5. The existence of a week--a segment of time unassociated with cycles dictated by celestial bodies (Creation week--7 days²⁴).
6. The commonality of the name for the seventh day in multiple languages and cultures²⁵ (Sabbath¹⁵).
7. The establishment of marriage--needed for stable human societies--which exists worldwide but is currently under attack by modern--and largely secular--Western society (Adam and Eve²⁶).
8. The ever-present evidence of death, disease, heartache, calamity, toil, predators, crime, and war (The Fall²⁷).
9. The inability for us to do what is right even though we know the right thing to do as a recurrent theme in both history and our present condition (The Fall²⁷).
10. The establishment of worship among humans, albeit with widely varying "true" and "false" forms (Cain and Abel²⁸).
11. Concepts of law, evidence, justice and mercy later applied to judicial proceedings (Cain and Abel²⁸).
12. Vast irregularities in landscape, an "unstable" earth with tectonic plates and earthquakes, the current size of land animals in comparison to ancient and extinct land species, sedimentary rock containing vast numbers of fossils, otherwise inexplicable biologic events such as fossils of large tropical beasts in the Arctic and salt water mollusk fossils in the Black Sea, the Grand Canyon and other amazing and otherwise inexplicable geologic formations, vast reserves of oil and coal beneath the earth, tar pits like the one in La Brea, volcanic activity (Worldwide Noachic Flood²⁹).
13. The Sumerian city-states as the earliest recorded human history--older than any other history from anywhere on earth--occurring in the vicinity of the Tigris and

Euphrates Rivers and representing a sophisticated and well-developed population (events after The Flood)

14. The distribution of humanity throughout the globe with widely varying languages and cultures, somehow "discovering" each other after several centuries--like Marco Polo "discovering" the Orient, Europeans "discovering" Native Americans, Europeans "discovering" ancient Polynesian and Micronesian cultures (Tower of Babel³⁰)
15. The commonality of varying creation and flood accounts throughout the world (The Flood and the Tower of Babel)
16. The existence of a widely distributed people of common genetic ancestry³¹ [<http://www.thedailybeast.com/newsweek/2010/06/03/the-dna-of-abraham-s-children.html>] known as "Jews" (Abraham, Isaac, Jacob, the Exodus).
17. The existence of the great Abrahamic religions--Judaism, Christianity, Islam--based on monotheism (Abraham³²).
18. The continual conflict among peoples in the Middle East, particularly among members of these Abrahamic religions (Isaac and Ishmael, Jacob and Esau, descendants of Abraham and Canaanites--reminds one of the "Hatfields" and the "McCoys").
19. Archeological sites traced back to ancient history (multiple Bible accounts).
20. The finding of ancient bones and ancient chariot wheels from 18th dynasty Egypt at the bottom of the Red Sea near Nuweiba, Egypt³³ (Red Sea Crossing in Exodus¹⁷).

At this point, as a forensic scientist, I could state, under oath and to a reasonable degree of certainty, that the ancient account is sufficient to explain ("consistent with") present-day empirical and physical evidence and that there are no inconsistencies. The judge would then ask both attorneys, "May the witness be excused?" After both sides and the judge would consent, I would then walk out of the courtroom and out of the courthouse, having completed what I was asked to do.

Once again, as a scientist and a person who applies logic, I can only say if the ancient account is consistent or not consistent with the evidence. Even though I could conclude that the account is false from even one inconsistency, I cannot deductively determine that the account is true. That would be up to the jurors who, having heard all the evidence, get to determine beyond a reasonable doubt in a criminal case if the defendant is guilty or not guilty. Or in this case, if the account is true or not true.

For that, I would have to enter the jury room with you. In the next chapter, I will offer to you exceedingly strong inductive arguments as to why you should declare "true" beyond a reasonable doubt that the God of Abraham, Isaac, and Jacob created the heavens and the earth in six literal days.

Chapter 6: Inductive Arguments

In Chapter 5, I demonstrated through the Forensic Scientific Method and the Inferential Test that the historical account verifying a six-day creation is sufficient to explain ("consistent with") physical and other empirical evidence in the present. I did this using deductive inference.

Still, at this point, you may not be persuaded of the truth of this argument beyond a reasonable doubt. To do that, I need to offer several *inductive* arguments. Once I have done that, I believe that if you are honest with yourself, you will find no reason to doubt the truth of the six-day creation account. You will also eliminate Darwinian or Neo-Darwinian Evolution and the Big Bang theory from any further rational consideration.

Remember that *deductive* inference means that the truthfulness of a conclusion can be *guaranteed* as long as the premises are true. I have offered such deduction so far, but at this point you may wonder if the premises I have offered are true. Sure, the present-day circumstances we all can observe are consistent with the account offered in the Torah, but how do we know that the Torah is not some "cunningly devised fable"³⁴ that just happens coincidentally to explain present-day evidence?

For this, I have to offer *inductive* inferences, where the truthfulness of the conclusions can be considered as probable but cannot be guaranteed. In the argument for a six-day creation, one should find that the inductive inferences I offer in support of the argument will indicate exceedingly high probability--making the argument exceedingly *strong*. A *weak* argument--such as the one offered by Darwinists--is an argument that is improbable--in the case of Darwinism, exceedingly improbable or exceedingly weak.

To understand better the concept of inductive inference, I would like to offer a classic example of the three modes of inference--inductive inference, deductive inference and abductive inference. Abductive inference is another term for hypothesis, "guessing," "reasoning backwards," or affirming the consequent. This example was offered originally by scientist, mathematician, and logician Charles Sanders Peirce³⁵. An inference, once again, is "a conclusion based on evidence and reasoning"⁴.

Let us say we have a bag filled with beans. I reach into the bag and pull out a few beans at a time. Those beans are white. If I were to conclude that all the beans in the bag are probably white, I would be inferring inductively. You may wonder, "Why not pour out all of the beans in the bag and look at them?" If I did that, I would then be certain, of course, but there may be varying, practical reasons why every item under any particular consideration might not be counted, including that it might be impossible or too expensive. Sometimes one has to perform *random sampling* in order to understand the probable nature of all of the beans in the bag. The larger the sample I take, the more probable the conclusion from the sampling. In other words, pulling 1000 white beans from the bag makes for a stronger argument that all the beans in the bag are white than pulling 10 white beans from the bag.

Now, let us say we accept after all of that sampling that all the beans in the bag are white. I then put my hand into the bag and enclose my hand around several of them. What color are the beans? White, of course. That is a deductive inference, based on MP: If beans are from this bag, then they are white. I grabbed beans from this bag. Therefore, the beans I grabbed are white. The truthfulness of the conclusion depends on the truthfulness of the two premises: "All beans from this bag are white," and "I grabbed beans from this bag."

If I later come to you with beans in my hand and you see that they are white, you could then speculate that I pulled the beans out of that particular bag of white beans. That would be an *abductive* inference. It is speculation, of course--affirming the consequent--but science would not progress without scientists being willing to offer hypotheses to be tested. Nevertheless, one cannot *guarantee* that the beans were taken from that particular bag with any certainty. One point, however, needs to be made clear: abductive inference probably works better when the available choices are few, but it works exceedingly poorly--even not at all--with complex past events, as I demonstrated previously in Chapters 1 and 2 of this treatise. How the universe and life came to be are exceedingly complex past events.

We have already covered deduction and abduction, but now we focus on induction. The "looking at and counting the beans in the bag" example above is one of the forms of induction that I will employ. It is known as *induction by enumeration*. The items to be enumerated are exceedingly numerous and include both people and events.

But that is not the only form of inductive inference I will offer. I will also offer *arguments from analogy*. An argument from analogy takes the following form:

A is similar to B
A has property P
Therefore, B has property P

For example, the Perinatal Biology department at my *alma mater*, Loma Linda University in Southern California, uses arguments from analogy when they study the physiology of pregnant sheep and unborn ewes. They argue that they can understand the functioning of the human fetus inside the human mother from their studies.

I will also offer inductive arguments on the basis of *explanatory power*. An argument with great explanatory power is able to explain a large number of known facts. In contrast, an argument with poor explanatory power explains hardly anything at all.

Without further adieu, here are my inductive arguments for a six-day creation.

I have already referred to the nature of past events. They are complex for any one object or individual and they are exceedingly complex for numerous objects or individuals. Past events are unique. They only happen one way at one particular point in time and they are not repeated in exactly the same fashion even at a different time. This is why inferring past events from physical evidence is an exercise in futility. It is

like trying to find a single needle in an infinitely large haystack. Imagine for instance, looking at an elderly World War II veteran who participated in the storming of Normandy on D-Day. Could I look at his lined face and describe the precise sequence of events he went through during that attack? Could I look at his hands and feet and tell what he did and where he walked during and after that invasion? Of course I could not! To even say I could would be absurd! Scientists who claim they can infer past events from physical evidence commit a similar absurdity.

On the other hand, if I allowed the World War II veteran to tell his story, I could learn from him what I would never have learned otherwise.

Now let us say that we are not only interested in the story of just one World War II veteran but also the collective accounts of every soldier that participated in that war. The stories then become extremely complex and interwoven. The complexity would be so great that the only way we could talk meaningfully about it would be to summarize it. Such a summary is called *history*. One important point about such a summary is that all who participated in the events would all agree that the summary is true, even if one's particular participation might vary from another. Such history documented collectively in the form of writings and images--records--would then be preserved from generation to generation.

On occasion, we may encounter what are known as *conspiracy theories*. Two examples are the theories of "9/11 truthers" who claim that the U.S. government orchestrated the collapse of the World Trade Center towers and the "birthers" who claimed that President Obama lied about being born in the United States in order to be elected President. Such theories arise from a few people who were not eyewitnesses but simply affirmed the consequent and gathered a small following to do the same. Such theories collapse under the application of a little evidence and common sense. There is no plausible reason why the US government would destroy the towers and kill so many people. It does not explain the attack on the Pentagon on the same day and why the government would want to destroy a major portion of itself. It does not explain the crash in Shanksville, PA. It does not explain why President Bush and all his staff would be under such stress both during and long after those events--events that they themselves supposedly planned. Why would the government activate its own F-16 fighters to shoot down commercial aircraft in order to protect itself from itself? Where are the witnesses to support that the theory occurred as speculated?

And regarding the birth of President Obama, all he had to do was produce that long-form birth certificate, and that theory disappeared like dew on a hot day.

"Cunningly devised fables" do not last forever, nor do very many people support them. They are also easily falsified by a few facts. On the other hand, history is supported by innumerable people who maintain records year after year, generation after generation. The writings of Moses are not "cunningly devised fables." If they were, they would not have withstood the test of time.

"But what about Santa Claus?" you might ask. "Hasn't he withstood the test of time?" Sure, but no one claims (except for small children, perhaps) that his story is something other than a fable and not even one that was "cunningly devised." The story of Santa Claus certainly does not credibly or factually explain anything that we observe presently, and there are not millions of adherents who worship Santa Claus and maintain ancient records about him.

None of us doubt for a moment that World War II occurred, even though relatively few of us now were alive when it happened. We accept it intuitively because of the historical argument I offered above. To believe otherwise would be ridiculous. We also believe that the Civil and Revolutionary Wars occurred too, even though none of us were alive when those happened. We even believe "Columbus sailed the ocean blue in 1492" though none of us were alive when that happened. Then there was the Roman Empire. Alexander the Great. Medo-Persia. Babylon. Assyria. Ancient Egypt. Do you doubt that these existed?

Now let us say we decide that World War II never happened. Let us say we came in with a celestial cookie cutter and removed World War II. Would we be able to explain either present or previous events? No. We would no longer have military bases in Europe or in Japan. We would no longer have a memorial at Auschwitz to visit on a trip to Europe. We would not have had a Berlin Wall to tear down. We would not have had the Soviet occupation of Eastern Europe. I daresay we would not have had a Cold War develop. Consequently, we would not have had any reason to go to war in Vietnam. We would not have had the invention of nuclear warheads, and nuclear bombs would not have been dropped on Nagasaki and Hiroshima. Consequently we would not have any current concerns about nuclear capabilities in North Korea or Iran.

One event leads to another which leads to another, *ad infinitum*. Remove any step in the sequence and everything greatly changes. If we had no Red Sea rescue and no Exodus, who would have been put in Auschwitz? Certainly not Jews because Jews would not exist. If we had no Red Sea rescue and no Exodus, there would be no Moses to write down what happened (he might have continued herding sheep in Midian). We would have no record of a heavens-and-earth creation in six literal days. We would not have had millions of people receiving manna in the desert for 6 days out of 7. And we would not have had innumerable large numbers of people maintain the writings of Moses over centuries to the present day. How is it that so much hinges on a "cunningly devised fable"?

Consider what happened to me last Saturday morning. I awoke when the sun came up. I went with my wife to Sabbath School and church. We drove there in a car fueled by gasoline. As we drove on Interstate 435, I slowed down because I saw a police officer on the shoulder and I was exceeding the speed limit. I took the Antioch Road exit, and while driving north on Antioch, we passed several Jews in yarmulkes, carrying copies of the Torah, walking to a synagogue. We arrived at a church that has on the roof of its sanctuary a cross. At Sabbath School and church, we entered into worship with others of different nationalities, races and languages.

How much of what happened is explained by a six-day creation account? All of it! You saw the 20-item list in Chapter 5. Many of the items in that list explain everything above.

How much is explained by evolution? Well...none of it.

Evolution does not account for a sun rising. It does not account for the measurement and passage of time. It does not account for Sabbath School and church. It does not account for me being married. It does not account for a car fueled by gasoline. It does not account for traffic laws or any other laws. It does not account for my innate tendency to disobey laws. It does not account for a road named Antioch, made famous by the large number of Jewish people who lived in an early Syrian city named Antioch, a city with subsequent importance to Christianity. It does not account for the existence of Jewish people wearing yarmulkes and carrying copies of the Torah to a synagogue. It does not account for the Cross of Christ (Christ was born a Jew, lived among the Jews in a Jewish homeland, and was crucified by the Romans at the insistence of Jewish leaders). It does not account for why people even worship. And it does not account for different nationalities, races and languages because it is natural for humans to congregate together in cities and not to separate from and lose track of each other, forming isolated gene pools and separate languages.

Evolution has poor explanatory power while a six-day creation explains about everything one can think of. So which one is the "cunningly devised fable"?

I told you at the outset that I would prove to you beyond a reasonable doubt that the heavens and the earth were created in six literal days. Did I meet that burden of proof?

The next several chapters will be an analysis of why so many brilliant people choose to accept a cunningly devised fable. Stay tuned.

Chapter 7: Analysis of Counterarguments

Why and how do so many brilliant people argue against a six-day creation?

If one looks at the Torah and then follows history in timeline fashion from the ancient past to the present, one can discern a repeated theme, not only in the first five books but also in the rest of the Bible--Old and New Testaments--and in history--even history from "secular" sources. The apostle Paul summarizes this theme the best, in my opinion:

For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who suppress the truth in unrighteousness, because what may be known of God is manifest in them, for God has shown it to them. For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse, because, although they knew God, they did not glorify Him as God, nor were thankful, but became futile in their thoughts, and their foolish hearts were darkened. Professing to be wise, they became fools, and changed the glory of the incorruptible God into an image made like corruptible man—and birds and four-footed animals and creeping things. Therefore God also gave them up to uncleanness, in the lusts of their hearts, to dishonor their bodies among themselves, who exchanged the truth of God for the lie, and worshiped and served the creature rather than the Creator, who is blessed forever. Amen.

For this reason God gave them up to vile passions. For even their women exchanged the natural use for what is against nature. Likewise also the men, leaving the natural use of the woman, burned in their lust for one another, men with men committing what is shameful, and receiving in themselves the penalty of their error which was due. And even as they did not like to retain God in their knowledge, God gave them over to a debased mind, to do those things which are not fitting; being filled with all unrighteousness, sexual immorality, wickedness, covetousness, maliciousness; full of envy, murder, strife, deceit, evil-mindedness; they are whisperers, backbiters, haters of God, violent, proud, boasters, inventors of evil things, disobedient to parents, undiscerning, untrustworthy, unloving, unforgiving, unmerciful; who, knowing the righteous judgment of God, that those who practice such things are deserving of death, not only do the same but also approve of those who practice them³⁶.

I believe an appropriate summary of the above would be:

1. God showed Himself to men, both personally and through His creative work.
2. Men turned away from God, choosing to worship the created work (particularly the work of their own hands) rather than the Creator Himself.
3. God allowed it. As a result, the understanding of men became darkened because they chose to believe a lie rather than the truth.

4. Their darkened understanding resulted in throwing away any restraint and giving in to their own passions and lusts.
5. All the while, those who engage in these acts figure out ways to support one another even though they know that what they do is condemned.

One does not have to be much of a student of history or the Bible to see this played out over and over again. Man turning away from God to a worship of idols, developing a darkened understanding, and suffering the horrific consequences for that darkened understanding occurred over and over again throughout history. Even the Jews were enslaved by Egypt, by Assyria, by Babylon, by Medo-Persia, by Greece, and by Rome through much of their history as a result of disobedience and a darkened understanding³⁷.

In more recent times, following the preaching of the Christian gospel throughout the western world, men who believed fell away from the truth they learned. Political aspirations overtook spiritual ones. The Church became a political body seeking for ways to obtain power. Church leaders amalgamated elements of pagan worship with Jewish and Christian traditions as a means of winning greater influence among a wider swath of people. Eventually, in order to maintain power, teachings in the form of dogma became trenchant and opponents of dogma were put down and eliminated. A knowledge of God disappeared and men's minds became darkened during the Middle Ages.

This darkened state of affairs remained for several centuries, but as is true for all totalitarian enterprises, cracks eventually developed in the carefully crafted facade. A few men studied the biblical account and realized that they were being scammed. This resulted in the Protestant Reformation. Also during the same period, many people who had been denied a knowledge of God did not become any wiser about God during the long centuries of darkness. Instead, they used the political weakness of the Church to free themselves from unpalatable dogmatic teachings that men had endured for centuries. This resulted in the "Enlightenment;" however, rather than truly becoming "enlightened," they chose to arrive at "knowledge" in a different way. Bereft of an appreciation for the historical and biblical account, many men began to affirm the consequent about their nature, their purpose, and their existence. Several philosophers speculated about the human condition, looking into their own darkened hearts and relying on their own darkened understanding of the cosmos to find answers within themselves and from what they could observe. Some of these men remained "theists" (they believed in a personal god) but others became "deists" (they believed in an impersonal god who "wound up the watch" so to speak and walked away) and "atheists" (they did not believe in any god but believed instead that the cosmos spontaneously generated).

The popularity of atheism became a new phenomenon. Prior to the eighteenth century, the term, "atheist," was an insult. During the eighteenth century, it became a popular concept among intellectual elites. The power of all of these ideas--as confused as they were--grew to such a great extent that it finally erupted in Europe in the form of the

French Revolution at the end of the eighteenth century. Out of resentment for the Church, both deists and atheists conspired to eliminate church clerics and the aristocracy and to destroy the Bible--something that both deists and atheists also greatly resented. Although the Revolution was ultimately unsuccessful, the ideas that resulted from it continued among the elites and the chattering classes of later times. The concept of Darwinian evolution favored by atheists (deism greatly declined in popularity after 1800) provided an explanation among these supposedly learned but biblically ignorant people for how life came to be without God.

One of several important philosophers to emerge toward the end of the nineteenth century was a man named Friedrich Nietzsche (1844-1900). He was an unhappy man who ended life with a mental breakdown; nevertheless, he had the capacity to say what others (particularly those who wanted to remain employed) feared to say. He was the one who declared "God is dead." This statement, though misunderstood, was true: the God of Abraham, Isaac and Jacob no longer existed in the minds of many of the people he encountered, even though that God had existed in the minds of many for thousands of years before. As such, God was essentially "dead."

Nietzsche had another idea that also carried the ring of truth. Although biologists and other scientists claimed that the driving force of humanity was the "will to survive," he believed it instead to be the "will to power." He believed that the will to power better explained human behavior than the will to survive--that people crave to have power over others and to maintain that power even more than a desire to survive. I believe there is sufficient evidence in history to support that idea. Look at all the wars that have been fought for so long. They were not fought for survival but to control others.

With the Church no longer so prominent as a spiritual and political force, other groups had a "will to power"--aspiring to gain control over the thoughts and consciences of people. One of those groups consists of secular intellectuals who claim Science as their doctrine and catechism. To assert control over the minds of others, they have to create their own cosmogony--their explanation for "what happened" and "who is responsible for what happened" at the beginning of time. This is not a conspiracy, but frequently many with similar aspirations and goals will unite in common cause to meet common ends. To do what they intend to do, they have to fool a lot of people.

It is impossible for people to create their own cosmogony and to have it make sense in its entirety. People who propose that there is no God and that Darwinian Evolution and the Big Bang explain everything have to figure out ways for people to accept it, even though most people intuitively sense that what they are being told is wrong. Educated and brilliant men who occupy prominent positions in academic institutions have to employ logical fallacies to do this.

You do not believe me? Well, consider the example to follow.

Bertrand Russell, a prominent and brilliant atheistic philosopher delivered a speech in 1927, entitled "Why I Am Not A Christian"³⁸. [<http://www.positiveatheism.org/hist/>

[russell0.htm](#)] Russell had a brilliant mind, and this speech demonstrates his brilliant mind. What is brilliant about this speech, however, is not the truth it proposes: it is how it artfully tricks and confuses the listener, making his arguments seem plausible even though they are not. This can be discovered through an understanding of logical fallacies.

I have mentioned the *fallacy of affirming the consequent* multiple times. That is a *formal* fallacy. There are however a number of *informal fallacies* in Russell's talk. They are fallacies not because the argument form is invalid but because the premises are mistaken and mistakenly applied to the argument.

One such informal fallacy is the fallacy of *equivocation*. Often a word will have multiple meanings. If the meaning of a word is switched in the middle of an argument, the listener will be confused and tricked into thinking he or she has followed the logic.

Consider, for example, his "First-cause Argument."

Perhaps the simplest and easiest to understand is the argument of the First Cause. It is maintained that everything we see in this world has a cause, and as you go back in the chain of causes further and further you must come to a First Cause, and to that First Cause you give the name of God. That argument, I suppose, does not carry very much weight nowadays, because, in the first place, cause is not quite what it used to be. The philosophers and the men of science have got going on cause, and it has not anything like the vitality that it used to have; but apart from that, you can see that the argument that there must be a First Cause is one that cannot have any validity. I may say that when I was a young man, and was debating these questions very seriously in my mind, I for a long time accepted the argument of the First Cause, until one day, at the age of eighteen, I read John Stuart Mill's Autobiography, and I there found this sentence: "My father taught me that the question, Who made me? cannot be answered, since it immediately suggests the further question, Who made God?" That very simple sentence showed me, as I still think, the fallacy in the argument of the First Cause. If everything must have a cause, then God must have a cause. If there can be anything without a cause, it may just as well be the world as God, so that there cannot be any validity in that argument. It is exactly of the same nature as the Hindu's view, that the world rested upon an elephant, and the elephant rested upon a tortoise; and when they said, "How about the tortoise?" the Indian said, "Suppose we change the subject." The argument is really no better than that. There is no reason why the world could not have come into being without a cause; nor, on the other hand, is there any reason why it should not have always existed. There is no reason to suppose that the world had a beginning at all. The idea that things must have a beginning is really due to the poverty of our imagination. Therefore, perhaps, I need not waste any more time upon the argument about the First Cause.

Russell said, "It is maintained that everything we see in this world has a cause." He argued that if everything has a cause, then something must have caused God. "If there can be anything without a cause," he continued, "it may just as well be the world as God, so that there cannot be any validity in that argument."

What is artful about the argument is the equivocation. "Everything" can be understood as all items in the universe, which, of course, includes God. "Everything" can also be understood as all things that were made. No one in any usual sense considers a creator as something that was created, but Russell did this through equivocation in order to confuse the listener.

Russell also employed equivocation for other words. "Fiat" for example:

Kant [referring to Immanuel Kant], as I say, invented a new moral argument for the existence of God, and that in varying forms was extremely popular during the nineteenth century. It has all sorts of forms. One form is to say that there would be no right and wrong unless God existed. I am not for the moment concerned with whether there is a difference between right and wrong, or whether there is not: that is another question. The point I am concerned with is that, if you are quite sure there is a difference between right and wrong, then you are then in this situation: is that difference due to God's *fiat* or is it not? If it is due to God's *fiat*, then for God himself there is no difference between right and wrong, and it is no longer a significant statement to say that God is good. If you are going to say, as theologians do, that God is good, you must then say that right and wrong have some meaning which is independent of God's *fiat*, because God's *fiats* are good and not bad independently of the mere fact that he made them. If you are going to say that, you will then have to say that it is not only through God that right and wrong came into being, but that they are in their essence logically anterior to God. You could, of course, if you liked, say that there was a superior deity who gave orders to the God who made this world, or could take up the line that some of the agnostics ["Gnostics" -- CW] took up -- a line which I often thought was a very plausible one -- that as a matter of fact this world that we know was made by the Devil at a moment when God was not looking. There is a good deal to be said for that, and I am not concerned to refute it.

"Fiat" is ambiguous. It can be defined as both "a formal authorization or proposition; a decree" or "an arbitrary order"⁴. The ambiguity of the definition of the word confuses the listener when according to Russell, "The point I am concerned with is that, if you are quite sure there is a difference between right and wrong, then you are then in this situation: is that difference due to God's fiat or is it not? If it is due to God's fiat, then for God himself there is no difference between right and wrong, and it is no longer a significant statement to say that God is good." He switched the definition from "decree" to "an arbitrary order."

Look now at the "Natural-law Argument."

Then there is a very common argument from Natural **Law**. That was a favorite argument all through the eighteenth century, especially under the influence of Sir Isaac Newton and his cosmogony. People observed the planets going around the sun according to the **law** of gravitation, and they thought that God had given a behest to these planets to move in that particular fashion, and that was why they did so. That was, of course, a convenient and simple explanation that saved them the trouble of looking any further for any explanation of the **law** of gravitation. Nowadays we explain the **law** of gravitation in a somewhat complicated fashion that Einstein has introduced. I do not propose to give you a lecture on the **law** of gravitation, as interpreted by Einstein, because that again would take some time; at any rate, you no longer have the sort of Natural **Law** that you had in the Newtonian system, where, for some reason that nobody could understand, nature behaved in a uniform fashion. We now find that a great many things we thought were Natural **Laws** are really human conventions. You know that even in the remotest depth of stellar space there are still three feet to a yard. That is, no doubt, a very remarkable fact, but you would hardly call it a **law** of nature. And a great many things that have been regarded as **laws** of nature are of that kind. On the other hand, where you can get down to any knowledge of what atoms actually do, you will find that they are much less subject to **law** than people thought, and that the **laws** at which you arrive are statistical averages of just the sort that would emerge from chance. There is, as we all know, a **law** that if you throw dice you will get double sixes only about once in thirty-six times, and we do not regard that as evidence that the fall of the dice is regulated by design; on the contrary, if the double sixes came every time we should think that there was design. The **laws** of nature are of that sort as regards to a great many of them. They are statistical averages such as would emerge from the **laws** of chance; and that makes the whole business of natural **law** much less impressive than it formerly was. Quite apart from that, which represents the momentary state of science that may change tomorrow, the whole idea that natural **laws** imply a **law-giver** is due to a confusion between natural and human **laws**. Human **laws** are behests commanding you to behave a certain way, in which way you may choose to behave, or you may choose not to behave; but natural **laws** are a description of how things do in fact behave, and, being a mere description of what they in fact do, you cannot argue that there must be somebody who told them to do that, because even supposing that there were you are then faced with the question, Why did God issue just those natural **laws** and no others? If you say that he did it simply from his own good pleasure, and without any reason, you then find that there is something which is not subject to **law**, and so your train of natural **law** is interrupted. If you say, as more orthodox theologians do, that in all the **laws** which God issues he had a reason for giving those **laws** rather than others -- the reason, of course, being to create the best universe, although you would never think it to look at it -- if there was a reason for the **laws** which God gave, then God himself was subject to **law**, and therefore you do not get any advantage by introducing God as an intermediary. You really have a law outside and anterior to the divine edicts, and God does not serve your purpose, because he is not the ultimate **law-giver**. In short, this whole argument from

natural **law** no longer has anything like the strength that it used to have. I am traveling on in time in my review of these arguments. The arguments that are used for the existence of God change their character as time goes on. They were at first hard intellectual arguments embodying certain quite definite fallacies. As we come to modern times they become less respectable intellectually and more and more affected by a kind of moralizing vagueness.

Russell used equivocation to confuse the definitions of “law” in the minds of the listeners. Law can mean “the system of rules that a particular country or community recognizes as regulating the actions of its members and may enforce by the imposition of penalties,” or it can mean “a statement of fact, deduced from observation, to the effect that a particular natural or scientific phenomenon always occurs if certain conditions are present”⁴. He also used something else: an informal fallacy known as *ignoratio elenchi* or a “red herring” fallacy. A person using this offers a chain of reasoning that may seem plausible to the listener, but the arguer draws conclusions that are irrelevant to the argument. The argument “jumps the tracks” and ends up somewhere else. A funny example of *ignoratio elenchi* is the “Chewbacca Defense”³⁹. [<http://www.southparkstudios.com/clips/103454/the-chewbacca-defense>]

Consider my summary of the beginning of Russell’s rebuttal of the “Natural-law Argument”:

1. People thought the law of gravitation explained planets orbiting the sun.
2. Then Einstein changed our understanding of the law of gravitation, though Russell declines to explain that further.
3. So now we don't have the same law that we had in the Newtonian system, where we believed that nature behaved in a uniform fashion (Einstein rewrote the law?).
4. So many things we thought were natural laws are really human conventions. After all, there are three feet in a yard even in remote space (Huh?)--a “remarkable fact, but you would hardly call it a law of nature” (Huh??).
5. “And a great many things that have been regarded as laws of nature are of that kind” (What kind?).
6. “On the other hand, where you can get down to any knowledge of what atoms actually do (we have gone from gravity to atoms), you will find they are much less subject to law than people thought (Are atoms refusing to be law-abiding? And what does it matter what people think?), and that the laws at which you arrive are statistical averages of just the sort that would emerge from chance” (from gravity to atoms to rolling dice).
7. “There is, as we all know (“ladies and gentlemen of the supposed jury”³⁹), a law that if you throw dice you will get double sixes only about once in thirty-six times (What law is that? When did calculations of probability become “laws”?), and we do not regard that as evidence that the fall of the dice is regulated by design; on the contrary, if the double sixes came every time we should think that there was design.”

You can follow the rest of the argument and see one irrelevant premise following another. This is brilliant sophistry. The listener is led to think that design means “double

sixes coming up every time,” distracting him or her about the intelligence required to sustain life and the universe.

Russell also employed *petitio principii* or circular argumentation. A circular argument--also known as "begging the question"--occurs when one uses the conclusion of an argument as a premise to arrive at the conclusion of an argument. He stated:

...because since the time of Darwin we understand much better why living creatures are adapted to their environment. It is not that their environment was made to be suitable to them but that they grew to be suitable to it, and that is the basis of adaptation. There is no evidence of design about it.

If one tries to argue that there is no God and that there is Darwinism instead, he cannot use Darwinism as a premise for an argument against the existence of God!

Here is another similar circular argument:

When you come to look into this argument from design, it is a most astonishing thing that people can believe that this world, with all the things that are in it, with all its defects, should be the best that omnipotence and omniscience have been able to produce in millions of years. I really cannot believe it.

Those who argue publicly against the existence of God are highly intelligent and very artful. Furthermore, they employ *ad hominem* arguments. Personal attacks constitute *abusive ad hominem* (You and your Bible-thumping friends are idiots!). More charitable arguments--where that ignorant dunce who is your opponent cannot help himself--constitute *circumstantial ad hominem* (Immanuel Kant, according to Russell, "believed implicitly in the maxims that he had imbibed at his mother's knee"). Also, some may argue against the existence of God by pointing out the hypocrisy of His followers--a form of *ad hominem* known as *tu quoque*. Such arguments, often accompanied by an arrogant sneer, are designed to keep the listener off balance, distracting one from the major issues.

Numerous scientists who espouse Darwinism and Neo-Darwinism also commonly employ three more fallacies: the *straw man fallacy*, *moving the goalposts*, and the *Texas sharpshooter fallacy*.

The *straw man fallacy* involves the misrepresentation of the position of one's opponent, followed by an attack of the misrepresentation. The attack of the misrepresentation makes the listener think that the true position was successfully attacked. Russell did this repeatedly with the statements of Jesus (I will not further reproduce his arguments, but feel free to look them up). It is usually charitable for one when engaged in an argument to make sure that he or she thoroughly understands and states the opponent's position before attacking it. A brilliant man like Russell understood this, but rather than analyzing the historical and linguistic context of several statements made by Jesus and explaining those to the listener, he chose instead to attack straw man

caricatures of those statements. Scientists frequently use similar methods to attack arguments made by people of faith.

Many scientists also frequently *move the goalposts*. Imagine playing on a football team. Your team scores a touchdown, but your opponent approaches the referee and argues that the goalposts should be moved outside of the stadium and down the block. This illustrates an absurdity employed by these scientists. The opposing argument is never sufficient, regardless of the cogency or the soundness of the argument (a *cogent* argument is a strong inductive argument with true premises, just as a *sound* argument is a valid deductive argument with true premises³).

Scientists also use numerical and other empirical data to commit the *Texas sharpshooter fallacy*. Consider the story of the “Texas sharpshooter.” While randomly shooting at the siding of his barn one day, it occurred to a farmer to draw targets around the clusters formed from his randomly placed shots. After doing that, he invited his friends to look at his barn as he exclaimed, “Lookee here! I’m a Texas sharpshooter!”

Analyzing and perceiving patterns in physical data are often ways scientists use to surmise past events. The patterns are then frequently formalized. Such constructs include conclusions from radiometric dating⁴⁰ [<http://pubs.usgs.gov/gip/geotime/radiometric.html>] and index fossils⁴¹. [<http://pubs.usgs.gov/gip/geotime/fossils.html>] The clusters of data allow these detailed categorizations, and the data points outside of these targets?--well, they are simply “outliers” (the statistical definition of an outlier is: “a data point on a graph or in a set of results that is very much bigger or smaller than the next nearest data point”³). Such detailed categorizations may be useful as hypotheses, but hypotheses need to be tested. Unfortunately, past events can never be tested because they are in the past and not accessible to testing.

If I were one of the friends of the “Texas sharpshooter,” I might consider his “hypothesis” to be “interesting” but I would want to take the farmer to a target range to test independently how well he shoots before drawing any certain conclusions about his prowess. Such testing cannot be done with radiometric dating or index fossils because the events occurred in the past, and the past no longer exists in a real sense.

But of all fallacies offered by scientists and philosophers, there is no greater fallacy than...wait for it...wait for it...wait for it...

The fallacy of affirming the consequent for complex past events.

This fallacy is modern science’s greatest downfall. Natural and physical scientists may criticize forensic scientists for how they do science⁵, but in truth, organizations of natural and physical scientists perpetuate the problems. They are the source of the “voodoo science” for past events that we see perpetrated by forensic pathologists, child abuse pediatricians, and other forensic scientists and medical practitioners. It is high time that modern scientists got their act together and learned a little logic!

This treatise has been lengthy, but thank you for continuing to read. After summarizing and making one more final point in the Epilogue, I will conclude my argument.

Epilogue

My arguments in this treatise are summarized as follows:

1. The acceptance of an ancient account of a six-day creation of the heavens and the earth and a creator God is not only logically sound but also rational. The evidence for the veracity of that account is overwhelming.
2. Furthermore, the perpetuation of flawed and false theories for origins is due to the *fallacy of affirming the consequent for complex past events*. It is modern science's greatest failure. Nothing new will be learned about the past as long as scientists and philosophers cling to this fallacy. Past event science will remain "junk science" until this fallacy is confronted rationally.

As a forensic pathologist, my greatest concern remains the false accusation and imprisonment of innocent people due to "junk science." As I considered the topic of this treatise, I wondered if God had anything to say about the application of scientific method to past events.

Well, as it so happens, He does.

Witness accounts are important to God. The ninth commandment of the ten carved in stone by God's finger states, "You shall not bear false witness against your neighbor"^{42,43}. Furthermore, the Mosaic law--also given by God but handwritten by Moses⁴⁴--required the testimony of two or three witnesses before putting someone to death and required that those witnesses would be the first to inflict the penalty⁴⁵. Any person testifying falsely would be subject to the same punishment as the person he or she accused⁴⁶.

What about the murder without witnesses? According to the same Mosaic law:

If anyone is found slain, lying in the field in the land which the LORD your God is giving you to possess, and it is not known who killed him, then your elders and your judges shall go out and measure the distance from the slain man to the surrounding cities. And it shall be that the elders of the city nearest to the slain man will take a heifer which has not been worked and which has not pulled with a yoke. The elders of that city shall bring the heifer down to a valley with flowing water, which is neither plowed nor sown, and they shall break the heifer's neck there in the valley. Then the priests, the sons of Levi, shall come near, for the LORD your God has chosen them to minister to Him and to bless in the name of the LORD; by their word every controversy and every assault shall be settled. And all the elders of that city nearest to the slain man shall wash their hands over the heifer whose neck was broken in the valley. Then they shall answer and say, "Our hands have not shed this blood, nor have our eyes seen it. Provide atonement, O LORD, for Your people Israel, whom You have redeemed, and do not lay innocent blood to the charge of Your people Israel." And atonement shall be provided on their behalf for the blood. So you shall put away the guilt of

innocent blood from among you when you do what is right in the sight of the LORD⁴⁷.

No person was ever to be accused without witness accounts. Instead, the priests were called to make atonement to God on behalf of the nearest community for a crime that remained unsolved. It was the community that was held responsible for the crime, not a specific accused perpetrator. Perhaps there were some members of that community who knew what happened but refused to bear a witness account, or perhaps the community failed in their responsibility to safeguard its citizens; nevertheless, the community leaders and those who were appointed to settle controversies--the sons of Levi--were not permitted to accuse any individual without the required witness accounts. The ceremony was also an expression of faith in a God who would exact vengeance on the unknown perpetrator⁴⁸.

It is ironic that in these modern times, community leaders and those responsible for settling controversies now blame individuals for crimes not on the basis of witness accounts but on flawed science instead!

Without a witness account, we really do not know what happened in the vast majority of cases. Science is not a remedy for a lack of knowledge that can only be learned through witness accounts. Science does not take the place of absent witness accounts. Instead, forensic science and the other past event sciences are to be used to test witness accounts--even ancient witness accounts--for veracity. Anything beyond that is junk science.

Thank you for your time and consideration.

References:

1. Official Website for the Seventh-day Adventist Church: Fundamental Beliefs. <http://www.adventist.org/beliefs/fundamental/index.html>. Accessed October 3, 2011.
2. Bunch WH. Two Stories are Better than One: Looking Through the Lenses of Faith and Science. *Spectrum (Adventist Forum)* 2011; 39(3): 24-8.
3. Howard-Snyder F, Howard-Snyder D, Wasserman R. *The Power of Logic*, 4th ed. New York: McGraw Hill Higher Education; 2009.
4. The New Oxford American Dictionary. Accessed from Mac OS 10.7; 2011.
5. National Research Council. *Strengthening Forensic Science in the United States: a Path Forward*. Washington, DC: The National Academies Press; 2009.
6. Dr. Charles Smith: The Man Behind the Public Inquiry. CBC News Canada; 2010 August 10. <http://www.cbc.ca/news/canada/story/2009/12/07/f-charles-smith-goudge-inquiry.html>. Accessed October 4, 2011.
7. Doyle AC. A Study in Scarlet. In: Klinger LS, editor. *The New Annotated Sherlock Holmes (Vol. III)*. New York: W. W. Norton & Company; 2006, pp. 197-8.
8. Young TW. The Forensic Inference Series. <http://www.heartlandforensic.com/writing/forensic-inference>. Accessed October 4, 2011.
9. Young TW. The Inferential Test Is Always True. Think of it as a Law. <http://www.heartlandforensic.com/writing/forensic-inference/the-inferential-test-is-always-true-think-of-it-as-a-law>. Accessed October 4, 2011.
10. Genesis 1:1. The Holy Bible.
11. Matthew 19:26.
12. National Assembly Jewish Students, Hanefesh Community. How Old is the Torah?: The Five Books of the Bible. Is There Any Clear Evidence? http://www.hanefesh.com/edu/How_old_Torah.htm. Accessed October 5, 2011.
13. Exodus 20:8.
14. Exodus 20:11.
15. Genesis 2:1-3.
16. Exodus 16:1-5
17. Exodus 14:26-30
18. Exodus 16:35.
19. Numbers 1:2-4.
20. Numbers 1:20.
21. Numbers 1.
22. Numbers 14:33-35.
23. Deuteronomy 8:4.
24. Genesis 1.
25. <http://oneinmessiah.net/4thSab.htm>. Accessed October 5, 2011.
26. Genesis 2:24.
27. Genesis 3.
28. Genesis 4.
29. Genesis 6-9.
30. Genesis 11:1-9.

31. Begley S. The DNA of Abraham's Children. *Newsweek*; 2010, June 2. <http://www.thedailybeast.com/newsweek/2010/06/03/the-dna-of-abraham-s-children.html>. Accessed October 5, 2011.
32. Genesis 12-25.
33. http://www.arkdiscovery.com/red_sea_crossing.htm. Accessed October 5, 2011.
34. 2 Peter 1:16.
35. Peirce CS. Illustrations of the logic of science. Sixth paper—deduction, induction, and hypothesis. *The Popular Science Monthly* 1878;13:470-82.
36. Romans 1:18-32, NKJV.
37. Deuteronomy 28:15-68.
38. Russell B. *Why I Am Not a Christian*. Girard, KS: Haldeman-Julius Publications; 1929. <http://www.positiveatheism.org/hist/russell0.htm>. Accessed October 5, 2011.
39. <http://www.southparkstudios.com/clips/103454/the-chewbacca-defense>. Accessed October 5, 2011.
40. Newman WL. Radiometric Time Scale. In: *Geologic Time* (U.S. Geological Survey). U.S. Department of the Interior / U.S. Geological Survey; 2000. <http://pubs.usgs.gov/gip/geotime/radiometric.html>. Accessed October 6, 2011.
41. Newman WL. Index Fossils. In: *Geologic Time* (U.S. Geological Survey). U.S. Department of the Interior / U.S. Geological Survey; 2000. <http://pubs.usgs.gov/gip/geotime/fossils.html>. Accessed October 6, 2011.
42. Exodus 20:16 NKJV.
43. Deuteronomy 5:20 NKJV.
44. Leviticus 1:1-2.
45. Deuteronomy 17:6,7.
46. Deuteronomy 19:16-20.
47. Deuteronomy 21:1-9 NKJV.
48. Deuteronomy 32:35.