A VALID FAITH IN GOD

Understanding the Bible in Light of True Science and Prehistory

Richard R. Burky, PhD

A VALID FAITH IN GOD

...Understanding the Bible in Light of Science and True Prehistory

Richard R. Burky, PhD

Copyright © 2023 Richard R. Burky

All rights reserved

A new approach to the creation/evolution controversy.

A new and practical understanding of faith in the biblical God and Jesus that allows full acceptance of the truth of scientific dating methods, the geologic record, developmental sequences of fossil animal lineages, hominin lines, and prehistoric archaeology. This understanding retains the immense value of the biblical narrative, morality, and human purpose. It abandons faith in both an obsolete fundamentalistic interpretation of the Bible and in materialistic creation by random DNA replication errors followed by natural selection. A creative developmental process directed by supernatural intelligence over vast time periods fits the geologic, fossil, and archaeologic evidence far more effectively.

A few words of appreciation...

To my wife Carol for reviewing the manuscript, for correction of a multitude of errors, and for making the text far more acceptable to many readers.

To my friend Tim Snyder for a thousand and one questions, endless discussions, and perpetual encouragement to continue the quest.

Table of Contents

| Introduction | . 5 |
|--|------------|
| Chapter 1 The Nature of Faith | . 7 |
| Chapter 2 Evaluating Arguments Against the Supernatural | 12 |
| Chapter 3 Arguments for a Supernatural Creator | 22 |
| Chapter 4 The Reality of the Prehistoric World | 30 |
| Chapter 5 Is the Bible Totally and Literally "God's Word?" | 36 |
| Chapter 6 Why the Bible Qualifies to Remain | |
| the Primary Source for Faith | 43 |
| Chapter 7 Critical Conclusions | 49 |
| References | 51 |

Introduction

Entering my early adult life as a questioning yet fundamentalistic believer in the Bible I was attracted to a Church with a fundamentalistic approach to the Bible. As a boy growing up on a farm in the Midwestern United States I spent hours collecting Native American artifacts in the fields around my home. I collected rocks, minerals, and fossils from the gravel pit on our farm. Because of these interests, I developed a keen desire to know how the Bible, prehistory, and geology could and should be correlated.

The Church took a literal approach to early Genesis, justifying it with the Gap Theory and other creationist materials. Going to the Church's college I took all the courses I could to study the subject. Upon graduation I started taking geology and paleontology courses at local colleges and universities with the hope of understanding how the geologists could have gotten it so wrong. I soon had to face the fact that I was the one who was in error, not the geologists. I was convinced I could present this truth to the Church, and the leadership would be thankful to learn what was really true. That was well over 50 years ago and the Church is still not interested in seriously considering the matter.

I find this true of most fundamentalistic groups. I continued to study geology, paleontology, and archaeology in both college classes and in extensive fieldwork. I ultimately ended up with a PhD in anthropology with a major in archaeology from the University of California, Riverside. My dissertation research was on the radiocarbon dating of fossil bone. During that research period I did the lab work for determining the ages of about 200 prehistoric samples. I was privileged to do the lab work to date one of the oldest known North American burials at the time. Dates on four different burial materials all gave a date of about 9,500 years. The results of my research were published as an article in the professional journal, *Radiocarbon*. In the research process I made an additional discovery of a unique amino acid in fossil bone. That discovery was published by Oxford University Press as a chapter in the book titled: *Perspectives in Amino Acid and Protein Geochemistry*. After graduation I taught at California State Polytechnic University, Pomona for nearly 20 years.

Now retired, I want to summarize my research and conclusions on faith and the Bible for any who might be interested. I have a preliminary manuscript (which probably will never be published in print) that covers the more technical relationship problems between the Bible, geology, paleontology, and archaeology. (It is available free online as: *The Bible, Prehistory, and Evolution: Toward a Better Understanding* at https://www.Bible-Prehistory-Evolution.com)

I remain a convinced theist and Christian. I believe the Bible is the most important book we humans have available. However, the Bible must be correctly

understood for what it really is. The Bible is not the book fundamentalists understand it to be. A different understanding is necessary to fit scientific reality.

Chapter 1 The Nature of Faith

Conclusively proving God exists or doesn't exist by scientific methods is not possible. Science can do neither. God is not physical and so is not directly subject to physical scientific evaluation. Many answers for faith must come from outside "the science box." This reality must be accepted. God's existence and nonexistence has to be a faith decision for all humans. Believer and atheist alike start from the same scientific base.

This doesn't mean we don't look to science for evidence of God's existence. Dark matter and dark energy have not been directly observed and thus proven by scientific methods. Their presence is understood by how they affect matter that can be observed. The same is true for God. Scientific evaluation gives the best possible evidence for God's existence but cannot give "scientific proof" of that existence.

My best judgement and evaluation of scientific data is that there is a creating supernatural intelligence. I will give my reasons for that conclusion in the following discussion. "Why is there something rather than nothing?" is mentally and scientifically impossible to definitely answer. Yet, the fact remains that we and an enormous universe do exist. The nature of the origin of humans or the universe cannot be scientifically proven.

"Where did this supernatural intelligence or 'God' come from?" is another impossible question for humans. All thinking people are faced with this enigma without a provable scientific answer. This lack of absolute scientific provability is the necessary starting point for both faith in God and atheism. Answers for faith must come without absolute physical scientific proof. They must be based on the best judgment possible.

We can scientifically evaluate physical things like the universe, the earth, as well as living and fossil organisms. But all we can do is make faith judgments about how we or they got here; how we should be living our lives; and what the future holds. This is the reality of human existence. The Bible can play a major role in answering these questions. This is not, however, because it is the perfect, literally "inspired word of God," of the religious fundamentalist. It is rather because of what the Bible truly is. More will be said on this subject later.

Many things can be proven by science. God and the human purpose are not among them. These are faith questions and judgments, not legitimate scientific questions, or hypotheses. Science does trump many religious questions and faith conclusions if they counter the physical, scientific evidence. Faith is, however, a human necessity to have a confident, successful, and meaningful life. Even atheists and agnostics use faith to fill this human need for confidence and effective lives. Faith is a human need.

Faith is a judgment that should be based on the best facts one can know and understand. Many of these come directly from science. We can only make a true and effective faith judgment by what we know. This means that faith may be slightly different for each individual and change with time. Faith is a necessity for those areas of life which are outside the realm of physical determination.

Thus, religious faith is a conclusion that is based on human judgment concerning questions that are not subject to direct physical and scientific evaluation. Anything that can be scientifically evaluated, should be scientifically evaluated. Such questions and issues are outside the realm of faith: "faith is the substance of things not seen." Science is the substance of things that can be seen. If one absolutely knows something for sure, it is not something about which one has faith. To set one's faith contrary to what can be proven by observation and science is foolish. Many religious people have done this and continue to do it.

We live in a universe that contains a huge amount of material that can be understood scientifically. This includes an ancient earth that has had an incredible variety of living and fossil life forms. However, as will be evaluated, their ultimate origin is beyond a valid explanation by science. Even scientists revert to faith to answer the questions of origin. This fact will be dealt with in more detail later. The age-old, unanswerable questions of the origin of matter, life, and the existence of God remain outside human resolution other than by faith. This reality has to be faced.

We know the earth's geologic structure is not static, nor is the world of living organisms. Both are structured for continual change. We also know they are both very old. Both have been developed and changed dramatically since their origin. The path of this change can often be identified by science. The cause of the change is a different story. For geology, science has been able to determine the physical causes for many, if not most, changes. For the observed changes in living organisms, including humans, the causes are more difficult to determine and mostly dependent upon the faith of the observer. Many scientists, and even some believers, have faith that random errors in DNA replication followed by natural selection are the sole creators and developers of complex living organisms. This faith counters the incredible odds against such a process.

Much can be understood from science about the earth's geologic history and life's development. Such evidence should certainly inform one's faith and not be contrary to it. However, a multitude of questions remain about both origin and development in the biological realms. Guesswork is a beginning step in the scientific process. But guesswork must ultimately lead to physically testable hypotheses, or it is not science. If it does not lead to a true hypothesis, it remains mere guesswork or "storytelling" that is not scientific. Correctly evaluating these guesswork questions to turn them into true hypotheses is critical. One must not

be led into a dead-end faith by the mere storytelling of either bullying scientists, philosophers, or bullying religionists.

The most basic question to be answered by faith is, "Do supernatural forces exist?" To answer this question scientific evidence must be considered, but it alone cannot give an ultimate answer. A workable answer for us is only determined by a faith judgment that is in harmony with, but not proven by, scientific facts. The **theist**, by faith, believes that such supernatural intelligences, usually both good and evil, do exist. The **atheist**, by faith, believes that such intelligence forces do not exist. This necessarily leads the atheist to a parallel belief in materialism, which requires that everything that exists can and must be explained by purely natural, physical (scientific) processes. This encompasses all living organisms, including human beings with their incredible cognition and creativity. The **agnostic** believes, by faith, that it is impossible to conclude whether or not such intelligence forces exist.

The earth and universe exist in this form of mystery that requires all humans to "live by faith" of one kind or another. If the universe has been established by supernatural intelligence, it is clear that that intelligence is using this mysterious situation to fulfill a desired purpose for human beings. The believer must accept this condition and be willing to "live by faith."

There are bullying theists, atheists, and agnostics that are all convinced that their faith conclusions are correct and want to impose those beliefs on the rest of us. But the decision must be personal and critically evaluated to be the most effective. Many believers, however, merely adopt a fully developed faith from others with little critical evaluation. More on this later.

Science deals only with the physical world that can be sensed, measured, or predicted by some physical means. A creating God is understood to be outside this measurable physical world. Human consciousness or cognition gives humans a unique and mysterious god-like quality. This seems to be proving itself outside the bounds of scientific definition as well. The presence of such human consciousness and intelligence makes belief in a similar supernatural intelligence much more plausible. Faith is the only solution to this conundrum that allows one to move on in this human life with confidence and effectiveness.

Faith must also be upgradable when new knowledge is encountered.

If one's knowledge is poor, one's faith may not be the best. Faith must always be modifiable as new knowledge is acquired. This allows one to have an effective and dynamic faith without having perfect knowledge. One must continue to grow in knowledge and adjust one's faith throughout life.

Many short-circuit a faith evaluation by simply adopting the faith of others. That may be the religious faith in which they have grown up, that of some religious

group, or that of an influential teacher. This allows the faith of many to be defined by others and take on a whole different perspective than that of a personally evaluated and committed belief. If one takes on the faith of a group, one cannot modify and upgrade it when new knowledge becomes available to the individual. This restricts faith to "group think" or "group faith." Group faith requires group modification of faith. This often results in the endless splintering of many religious groups.

Everyone may not have the inclination to evaluate their own faith in depth. But each should seriously think about, evaluate, and be responsible for what they believe. Of course, many do not. Like a soldier joining an army, they are content to let the generals do the thinking for them, even if it costs them their life.

A true viable faith directs life and behavior. It structures worldview and lifestyle. It is the backbone of personal philosophy and understanding. It defines why we are alive, where we are going, and how we should be living to get there. It must be the true core of our being, not just an optional "add on" appendage to life.

Seven summary statements on faith...

- 1. Faith is not science or absolutely provable truth. Rather it is a "best judgment" decision on what is really true. To be valid it must be based on both science and truth, and not be contradicted by either. Faith is a judgment one must make, that should be based on the best truth and understanding one can obtain. However, it is not static. It must be dynamic and updatable as new knowledge and understanding develop.
- 2. To get the most effective understanding of life, we need to use both faith and science. Science, truth, and faith must be compatible tools for gaining the best possible understanding of life. Faith is for those things that cannot be understood or explained by science.
- 3. Consider the words of the English science philosopher Sir William Henry Bragg (1862-1942): "Sometimes people ask if religion and science are not opposed to one another. They are: in the sense that the thumb and fingers of my hands are opposed to one another. It is an opposition by means of which anything can be grasped."
- 4. Consider the words of the writer of Hebrews 11:1 "Now faith is the substance of things hoped for, the evidence of

things not seen." Science, on the other hand, is the substance of things that can be seen.

- 5. Faith, like love, without emotion is dead. Emotion moves the soul to make love and faith effective.
- 6. Faith may be either a personal intellectual judgment or an "adopted" faith accepted intact from an outside source or group. If faith is adopted one does not control their own faith. An adopted faith is controlled by the "group think" or evaluation of others. This is true in both science and religion.
- 7. Science can neither prove nor disprove the existence of God. Why then should one take the science community's conclusions as the final word about the existence of God? Faith must decide this issue for us. Atheist, agnostic, and believer all start from the same scientific base. The universe, physics, geology, the history of living and fossil organisms, archaeology, and the Bible all present truths to be considered when making a faith decision. All faiths are not created equally. All religion does not stand or fall together.

Chapter 2 Evaluating Arguments Against the Supernatural

Many skillful and important scientists are convinced we are alone in the universe. They are convinced there is no God or supernatural entities, good or evil. Some of these scientists and science writers wax eloquently against the supernatural. When closely examined, their concepts are most often based on their strongly biased faiths rather than scientific facts. Remember also, that **most agree science can neither prove nor disprove the existence of the supernatural**. Why then should one take their conclusions about the nonexistence of the supernatural as the final word?

A few science writers throw a lot of dust up into the air and verbally castigate religious belief in the supernatural. This is often based more on the bullying faith and personality of the writer rather than on provable science. The words of other, more honest, even atheistic, scientists help sort the truth, error, and faith out of their writings. A few scientists acknowledge faith as the basis of their conclusions. Most, however, do not. They insist that their understanding is the only rational way to understand the realities of life.

There is a strong bias against the existence of any supernatural forces by many in the scientific community. Science is, after all, totally based on the physical, that which can be physically examined, tested, and retested. The supernatural is outside of this realm. Science doesn't disprove the existence of the supernatural, it simply cannot evaluate it. Because of this, science generally ignores it and treats the supernatural as if it doesn't exist.

Science can only evaluate physical things that operate totally by what we may consider physical laws and principles. This is how science is conducted. Such an approach has been very effective and useful. It has been effective because it did not accept quick and erroneous "supernatural" answers for what were truly physical questions.

Early in the development of scientific progress, when things were discovered that had unknown causes, it was often automatically attributed to the action of the supernatural. This became known as the "God of the gaps" solution. However, with further scientific exploration, physical causes for most of these phenomena were discovered. This, of course, discredited the resort to God for special intervention to cause things to happen. This led to the conclusion and faith among many scientists that there is never a reason to appeal to any special action by supernatural forces. It has even led many to the conclusion that the supernatural does not exist. Their **faith** is that science will always find a physical answer.

Many scientists' faith is that random mistakes in the DNA replication process followed by natural selection has produced the wondrously complex world of

living organisms, including humans. This is against unbelievable physical odds and without actual proof from the fossil record. Such conclusions are not validated by scientific evidence. This line of thinking will be explored more fully in later chapters.

"God of the Gaps" thinking has now been replaced by "Natural Selection of the Gaps" thinking for many scientists to explain the origin of living and fossil organisms. This is based on faith just as much as "God of the Gaps" thinking was based on faith. "Just So" stories are often compiled to explain how natural selection could possibly have created the complex structures of living organisms. These may be "hypothesized" stories, but they are not true scientific hypotheses because they can never be physically tested. They are not science. They are merely stories. A later reference by a noted evolutionist decries this situation, even though he himself would not revert to belief in the supernatural as a solution because of his faith.

All this has, unfortunately, led to a general faith in much of the scientific community that supernatural forces cannot and do not exist. Experience shows that physical things work without direct supernatural intervention. This is why science works so well as it does. This does not, however, prove that it is impossible for supernatural forces to intervene in physical things. Human beings have the power to intervene in physical processes. If supernatural forces exist, they certainly have even greater power to intervene in physical processes should they choose.

Science cannot accurately determine what decision a jury, a wife, a teenager, or any human being will make. Likewise, the supernatural is outside the realm of, and evaluation by, science. Science can determine how the chemistry of the human body works, but not what decisions the human mind and "spirit" will make as a result of that elusive quality, human cognition. The presence of this seemingly "spiritual" quality in the physical world of human beings should give one pause before writing off "supernatural intelligence" as nonexistent.

We will examine the conclusions of some scientists and "science writers." We do not take their reasoning and conclusions lightly. However, we must evaluate them to see if their conclusions are scientifically defendable. Or if they are not rather biased heavily by their own faith. Does the evidence really justify their conclusions?

Edward O. Wilson is a very well-known and respected American scientist who recently died. He spent many years as a professor at Harvard University. He wrote the following conclusion about the supernatural.

We were created not by a supernatural intelligence but by chance and necessity as one species out of millions of species in Earth's biosphere. Hope and wish for otherwise as we will, there is no evidence of an eternal grace shining down upon us, no demonstrable destiny or purpose assigned us, no second life vouchsafed us for the end of the present one. We are, it seems, completely alone. And that in my opinion is a very good thing. It means we are completely free. (Wilson 2014:173)

His terms "chance and necessity" reflect the conclusion and title of a book by another prominent and influential Nobel prize winning French scientist, Jacques Monod. His conclusion is another that bears consideration because of the considerable impact it has had on the scientific community.

We call these events accidental; we say that they are random occurrences. And since they constitute the only possible source of modifications in the genetic text, itself the *sole* repository of the organism's hereditary structures, it necessarily follows that chance *alone* is at the source of every innovation, of all creation in the biosphere. Pure chance, absolutely free but blind, at the very root of the stupendous edifice of evolution: this central concept of modern biology is no longer one among other possible or even conceivable hypotheses. It is today the *sole* conceivable hypothesis, the only one that squares with observed and tested fact. (Monod 1971:112-113)

It is the conclusion to which the search for authenticity necessarily leads. The ancient covenant is in pieces, man knows at last that he is alone in the universe's unfeeling immensity, out of which he emerged only by chance. His destiny is nowhere spelled out, nor is his duty. The kingdom above or the darkness below: it is for him to choose. (Monod 1971:180)

We will come back later to Jacques Monod and examine his clear reasoning for his conclusions.

Less noted for their scientific achievements and more for their very vocal opposition to God and biblical faith are three prominent science writers. First is Sam Harris, noted especially for his influential *New York Times* bestseller, *The End of Faith*.

We will therefore want to understand those processes – biochemical, behavioral, ethical, political, economic, and spiritual – that account for this difference. We do not yet

have anything like a final understanding of such processes, but we know enough to rule out many false understandings. Indeed, we know enough at this moment to say that the God of Abraham is not only unworthy of the immensity of creation; he is unworthy even of man.

...We are the final judges of what is good, just as we remain the final judges of what is logical.

...The only angels we need invoke are those of our better nature: reason, honesty, and love. The only demons we must fear are those that lurk inside every human mind: ignorance, hatred, greed, and faith, which is surely the devil's masterpiece.

...This universe is shot through with mystery. The very fact of its being, and of our own, is a mystery absolute, and the only miracle worthy of the name. The consciousness that animates us is itself central to this mystery and the ground for any experience we might wish to call "spiritual." No myths need be embraced for us to commune with the profundity of our circumstance. No personal God need be worshiped for us to live in awe at the beauty and immensity of creation. (Harris 2005:226-227)

The second scientific writer is Richard Dawkins who writes more like a bullying salesman or politician than a careful scientist, but he is brilliant at what he does and very prolific. The titles of a few of Dawkins' books give a clear indication of his mission: The Blind Watchmaker, River Out of Eden, Climbing Mount Improbable, Unweaving the Rainbow, A Devil's Chaplain, The Ancestor's Tale, The God Delusion, The Greatest Show on Earth: The Evidence for Evolution, and Outgrowing God.

Richard Dawkins is a man of great faith. His faith surpasses that of many religious people. That faith is in creation by random DNA replication errors followed by natural selection. He is all about trying to invalidate a spiritual realm by his absolute faith in physical and scientific methodology, and especially in natural selection. The scientific "provability" of such faith is brought into serious question when we consider quotes of prominent evolutionary scientist, Richard Lewontin. For now, let's consider a few of Richard Dawkins' concepts...

I am not attacking any particular version of God or gods. I am attacking God, all gods, anything, and everything supernatural, wherever and whenever they have been or will be invented. (Dawkins 2006:36)

Natural selection is not only a parsimonious, plausible, and elegant solution; it is the only workable alternative to chance that has ever been suggested. (Dawkins 2006:120)

Knowing that we are products of Darwinian evolution, we should ask what pressure or pressures exerted by natural selection originally favoured the impulse to religion. (Dawkins 2006:163)

He has a substantial hatred for the gross errors of the fundamentalists, who do indeed have many serious problems to be considered. Richard Dawkins is a very clever and effective writer and speaker. He uses significant tricks of his trade to discredit those he opposes. His approach, however, is not straight forward and honest like we might expect from a scientist carefully weighing the opponents' facts in their proper context.

As an example, on one hand he praises Jesus for an "enlightened" approach to morality and curses the Old Testament for the harshness of its ten commandments. He fails to take note of the fact that when one asked Jesus what to do to attain eternal life, Jesus told him to "keep the commandments." When asked which? Jesus began to repeat the ten. Dawkins does not necessarily bring things together intellectually. Rather he writes aggressively and cleverly to make his anti-religion point.

He does, however, bring out some important points on the misdirection and illogical approaches many religions and believers have taken. Serious religious people could use his books to help correct unreasonable logic and conclusions they make, by carefully separating the wheat of his works from the chaff.

One might agree with many of the criticisms all three of these "religion bashers" bring up. Truth, critical thinking, and valid science must trump wrong faith. This, however, also applies to the "faith" of the scientific community which is not without its unreasonable approaches and conclusions. As humans we tend to believe what we want to believe.

Richard Dawkins uses much storytelling about how natural selection could have created both organs and organisms. His natural selection "stories," however, are glibly passed on without the slightest tinge of shame or questioning their lacking scientific evidence with which they can and should be evaluated. To emphasize this flaw let's examine a few quotes and comparisons of other noted scientists.

Consider the candid observations and evaluations by prominent evolutionary scientists: Richard Lewontin, A. S. Romer, and Elwyn Simons. I believe the best critical evaluation of the bullying assertions in Richard Dawkins' books are given by these scientific evolutionists themselves.

A few quotations by prominent evolutionist Richard Lewontin cut through a lot of the dust thrown up by Professor Dawkins. The editors of a collection of articles on the evolution of human cognition had asked Richard Lewontin to give them support against "unremitting attack" against the suggested evolutionary explanations for the development of human cognition. His answers are enlightening. First, a few words from the editors of the work in which the article occurs to give context.

Despite the appeal of explaining human cognition as the result of evolution through natural selection, Richard Lewontin, an expert in genetics and evolution, has strong words of warning. In this elegant chapter outlining the characteristics of evolutionary explanation, he makes a clear and powerful case for why such explanations of human cognition can only be regarded as storytelling. (Lewontin 1998:107)

Now for a few pertinent comments from the article by Lewontin himself.

The problem is that **we do not know and never will**. We should not confuse plausible stories with demonstrated truth. There is no end to plausible storytelling...

I have not added a last section relieving the "unremitting attack" because I cannot. It may be true that we cannot keep people from storytelling, but I cannot see that my response to that should be to tell stories. Indeed, in one place you even invite me to do so using the word "hypothesis"... But calling a story a "hypothesis" does not make it more scientific. We should reserve the notion of "hypothesis" for assertions that can be tested. (Lewontin 1998:129)

Finally, I must say that the best lesson our readers can learn is to give up the childish notion that everything that is interesting about nature can be understood. History, and evolution is a form of history, simply does not leave sufficient traces, especially when it is the forces that are at issue. Form and even behavior may leave fossil remains, but forces like natural selection do not. It might be interesting to know how cognition (whatever that is) arose and spread and changed, **but we cannot know. Tough luck**. (Lewontin 1998:130)

These quotes should not be taken lightly. They help emphasize the fact that a strong faith in natural selection as the only proven creator and changer of living organisms is based on lacking and incomplete evidence in the fossil record. Sufficient evidence to prove creation by natural selection is simply not in the physical record. There are far too many gaps. Faith in supernatural direction of the developmental process may not be proven by the fossil record, but neither is it excluded by the fossil evidence as many science writers like to imply.

Two older quotations from prominent American paleontologists help clarify that faith is at the base of natural selection belief. (The emphasis in all these quotations is mine, of course.)

Philosophers and other non-scientists have often suggested that evolution may have been due to some Supernatural agency or some mysterious "drive" within the animal itself. **No one can prove, of course, that this is not the case.** But as scientists we attempt to explain the phenomena of nature in terms of natural laws before resorting to supernatural interpretations. (Alfred S. Romer, *The Vertebrate Story*, p. 5, Univ. of Chicago Press, 1959).

Of course, he never resorts to supernatural interpretations regardless of the lack of physical evidence because his faith in natural selection eliminates the supernatural even from consideration.

Another quotation by Elwyn Simons:

Nevertheless, much of what appears to be a basic human need, that of understanding the place of man in the universe, lies outside the area of descriptive and interpretive science. These other parts have traditionally been dealt with by theologians and philosophers. Consequently, this book will deal with what happened in the history of the close relatives of man and of man himself. Why this happened remains a matter of individual belief. (Elwyn L. Simons, *Primate Evolution: An Introduction to Man's Place in Nature*, p. v, The Macmillan Co., 1972).

We should consider Richard Dawkins' absolute faith in natural selection in the light of these quotes.

Statements by a theist physicist, John Polkinghorne, in relation to the Dawkins situation are also worth considering.

Yet one can accept the insights of natural selection and still feel that one has not heard the full story...

Someone like Richard Dawkins can present persuasive pictures of how the sifting and accumulation of small differences can produce large-scale developments, but, instinctively a physical scientist would like to see an estimate, however rough, of how many small steps take us from a slightly light-sensitive cell to a fully formed insect eye, and of approximately the number of generations required for the necessary mutations to occur. One is only looking for an order of magnitude answer, comparable in crudity to the back-of-the-envelope calculations of early cosmologists, but our biological friends tell us, without any apparent anxiety, that it just can't be done. So much of evolutionary argument seems to be that 'it's happened and so it must have happened this way.' (Polkinghorne 1994:16-17)

The third person I would refer to as a "scientific writer" rather than a working scientist, is Michael Shermer. He is publisher of *Skeptic* magazine, director of the international Skeptics Society, at one time host of a Skeptics Lecture Series at Cal Tech and host of many other anti-religion debates on the internet and around the world. He has given TED talks against religious belief. He self-describes himself as an agnostic with reservations.

If by fiat I had to bet on whether there is a God or not, I would bet that there is not. Indeed, I live my life as if there is no God. And if the common usage of the term atheism was nothing more than "no belief in a god," I might be willing to adopt it. But this is not the common usage, as we saw in the *OED*. (And we would do well to remember that dictionaries do not give definitions, they give *usages*.) Atheism is typically used to mean "disbelief in, or denial of, the existence of a God" (not to mention its pejorative permutations). But "denial of a God" is an untenable position. It is no more possible to prove God's nonexistence than it is to prove His existence. "There is no God" is no more defensible than "there is a God." The problem with the term agnostic, however, is that most people take it to mean that you are unsure or have yet

to make up your mind, so the term *nontheist* might be more descriptive. (Shermer 2000:9)

Michael Shermer points out many illogical and foolish things religious people believe and practice. He is a clear and critical thinker. I have heard him give very clear and valid arguments on different subjects. In many of these I would not disagree with him. When people believe untrue things, or do foolish things, because of their religious beliefs they set their religion and themselves up for ridicule and dismissal. Religious people should listen to this correction and be on guard against such errors and practices. The insights revealed by such skeptics give good reason to give up following things that are not true, and doing foolish things in the name of religion. But they offer no valid reasons to give up a true faith in a creating intelligence.

The mode of operation of Shermer is stated clearly in his following stated axiom...

There is no such thing as the supernatural or the paranormal. There is only the natural, the normal, and mysteries we have yet to explain. (Shermer 2006:53)

This is his faith. Such an axiom, based on faith, automatically excludes the supernatural from the picture entirely. "I am not evaluating, I have concluded. The question is closed."

Should the supernatural be brought into science?

Bringing the supernatural into the scientific process is not the answer. The basis of science is about testing how physical things work. It is not about how supernatural things work or interface with the physical things. Adding the supernatural to this process makes no sense. It is as illogical as if we were to add a supernatural step to solving a math problem. We cannot put God into a science lab and make Him do tricks for us to prove that He exists. We can only observe what is true or has happened in the past and make judgments about causes. To the extent that physical forces can fully explain what has happened in the past provides a legitimate scientific process. When the odds are astronomically large against a physical method being adequate to explain the phenomena in question, it is rational to consider the supernatural possibilities.

Faith is necessary and becomes significant when there is no reasonable physical process that can be found to explain what has occurred. Premature conclusions that it could only have been done by the supernatural can be a problem. This may create "God of the gaps" thinking that may not ultimately prove true. But never allowing a perpetual and impossible gap to be filled by the possibility of supernatural activity is also a problem, if we are seeking what is really true. Such a situation requires a judgment of faith.

There are countless gaps of this nature in the prehistoric record. Review the comment by Richard Lewontin. What should be concluded? We cannot wait a lifetime for an answer that may never come. Life would be over before one figured out how to live it. A faith decision is necessary. Faith allows one to move forward. Should a faith decision be found to be wrong sometime in the future, it can be modified when clearer truth is discovered.

Telling "Just So" stories that cannot be scientifically evaluated is not legitimate science. However, many scientists have wrongly forced them into science and deceived many by calling them science. If there is no physical way to prove or disprove them, they are not science and should not be presented as such. They are simply stories. Many scientists have simply traded "natural selection of the gaps thinking" for the "God of the gaps thinking" of past believers. Stories of how natural selection created some organism or feature that cannot be scientifically evaluated is not science and should not be considered, treated, or used to support science.

Personal faith is about making judgments of the facts for ourselves. It is not about scientifically proving or disproving facts to others. Discussions with others on the subject may point out logic weaknesses in our thinking that would be helpful to correct. One would hope and expect that a well-reasoned faith would carry some rational weight with others if they cared to consider it. However, one must realize that others have their own faith, biases, definitions, deeply ingrained concepts, and pre-formed opinions. It takes time for minds to change, and one must allow time for such change. Our faith is something we may reflect to others, but not something we force upon them.

To summarize this chapter... We must be careful whose faith, "facts," or opinions we accept. Some may have the academic degrees of scientists but if they resort to snake oil salesmen techniques to sell their ideas, they become snake oil salesmen. Don't buy your science or your faith from snake oil salesmen!

Chapter 3 Arguments for a Supernatural Creator

One can trace the roots for some major modern arguments against a supernatural creator back to the time of Charles Darwin. The theology of his day was primarily based on a fundamentalistic belief in the Bible. This promoted the general belief that all living species were created in fixed form about 6,000 years ago and never change. Charles Darwin discovered that some living organisms do indeed change over time. This change may occur by natural processes or be enhanced by artificial selective breeding by humans. This is how the genetic system works. The knowledge of how the genetic system works wasn't understood in Darwin's time. Darwin's observed changes in animals countered the misdirected theology of his day. Charles Darwin was not that opposed to the supernatural as his late in life autobiography makes clear.

Another source of conviction in the existence of God, connected with the reason and not with the feelings, impresses me as having much more weight. This follows from the extreme difficulty or rather impossibility of conceiving this immense and wonderful universe, including man with his capacity of looking far backwards and far into futurity, as a result of blind chance or necessity. When thus reflecting I feel compelled to look to a First Cause having an intelligent mind in some degree analogous to that of man; and I deserve to be called a Theist.

This conclusion was strong in my mind about the time, as far as I can remember, when I wrote the *Origin of Species*; and it is since that time that it has very gradually with many fluctuations become weaker. (Darwin 1958:77)

It seems clear that Charles Darwin did not have a strong objection to a supernatural intelligence at the core of the creation process. I believe he was strongly led toward discarding such belief by the bullying atheistic scientists and philosophers with whom he associated.

Another factor that had a strong impact on the discussion at the time was the discovery of the vast amount of time the earth's geological record revealed. A literal Genesis creation from some type of amorphous bulk about 6,000 years ago was completely at odds with the new scientific information obtained from geology. Because of the strong fundamentalistic approach to the Bible of the theological leaders, they rejected this truth from the earth's geologic record. Interestingly, Charles Lyell, the leading geologist of the time, was a theist. Darwin had taken Lyell's book on geology along with him on his Beagle voyage.

These realities helped initiate a major separation between scientists and the God of the Bible. There were no other viable gods in the culture that would even begin to qualify as meaningful, supernatural creators as much as the God of the Bible. Certainly, the natural human objection to having an authoritative God who had power over their behavior and morality played no small role in forming their human faith decision at the time. Once herd infection with a anti-supernatural philosophy had occurred in the scientific and philosophic communities, it became self-perpetuating. This herd philosophy and faith continues for many scientists today.

The fossil record definitely shows that some form of evolution is true. What it does not prove, however, is that the major changes were exclusively caused by natural processes. The available fossil evidence would more reasonably imply that intelligent creativity and oversight were central driving forces of this evolutionary process.

There is no fossil evidence proving that random DNA replication errors and natural selection were the major cause of evolution in complex animal lines. The fact of this missing evidence is most often glossed over by simply saying how few living organisms end up as fossils. While this fact may be true, the fact remains that adequate proof is simply not found in the physical record. This is the conclusion verified by evolutionist Richard Lewontin in the previous chapter. This is the situation where "natural selection of the gaps" thinking has been resorted to by most science writers to replace the theist's "God of the gaps" thinking for the missing evidence in the fossil record. They have just replaced one idea based on a supernatural faith with another idea based on a materialistic faith.

Comparing Human technology development ("evolution") with the fossil evidence for organic evolution.

Evidence by analogy is certainly not proof that something is true. However, analogy sometimes helps us open our minds to complex procedures that may well be true. The proof for the analogy must come from the actual evidence. In this case it must come from the fossil record. Consider this analogy.

Nearly every human technology one cares to consider shows an evolutionary developmental process over time. It is the way creative intelligent minds work. Automobiles, airplanes, computers, radio, TV, and even mundane things like paper clips and bottle or can closures reveal a creative design process that develops and evolves through time. Fossil organisms reflect a very similar developmental pattern. This would most reasonably imply development through time that was controlled by a creative and learning supernatural intelligence.

Consider an analogy of living organism evolution in the fossil record with the known history of the evolution of the automobile between 1885 and 1985. An encyclopedic and pictorial history of automobile development of that period is

mind expanding. The number and variety of automobiles produced is truly astonishing and of almost unbelievable variety. This was a creative design process driven by human intelligence. If we acknowledge or accept the existence of supernatural intelligence with an ability to engineer DNA, the parallels are intriguing!

Trying to piece together adequate evidence from the fossil record to prove natural selection by purely natural processes has not been possible. Such a search is similar to trying to piece together the complex history of the automobile between 1885 and 1985 by gathering bits and pieces from thousands of junk yards. The results would be similar. While a rather good sequence might be obtained of the more recent and popular models, an acceptable history of the older and less popular models would be nearly impossible to obtain. Many automobiles constructed by individuals or independent manufacturers would remain totally unknown. This process would yield absolutely no information about the actual designers or how the innovations came about. So much real history would be missed in such a "fossil gathering" process. Fortunately for understanding automobile development we have written and pictorial records. These give us a more complete history of the automobile and its creators than could ever have been compiled by merely searching junkyards. Unfortunately, for the history of living organisms, we are pretty much limited to searching "fossil junkyards."

There is, however, a major difference between human technology and living organisms. All human technology is assembled from scratch by external forces, processes, and materials, following some type of physical or mental blueprint. Living organisms, on the other hand, construct themselves from available nutrients by the patterns set in their DNA. To change how human technology progresses, the blueprints or mental design and manufacturing processes must change. To change how living organisms construct themselves the DNA must be changed.

DNA is a complex chemical. Its chemical reproduction mechanisms are precise, and the amount of information DNA can carry is phenomenal. The basic information DNA contains is how to construct proteins. These proteins then do most of the actual work of constructing and maintaining the organism. This is almost a miraculous feature in itself. How can one make a bird fly, produce a unique kind of nest, or sing a unique song by changing the type of proteins that are produced by its DNA?

Altering DNA by intelligence is a process that humans are now beginning to learn. It is a technique that an existing supernatural intelligence would have been using for literally millions of years. The fossil evidence easily allows and does not contradict such a process of development for living organisms.

Natural and artificial selection techniques can both alter DNA. Witness the development of dogs over the last several hundred years primarily by human selective breeding. Artificial selection by humans has created hundreds of types of dogs from what was most certainly wolf DNA. They did this within hundreds of years, while natural selection has likely changed the wolf DNA very little over thousands of years. Much more dramatic change could be generated by the actual chemical manipulation of the DNA. Such purposeful manipulation of DNA would fit the observed fossil evidence much more accurately than does the limited natural processes. The fossil record simply does not provide proof that random DNA replication errors followed by natural selection has been the driver of major changes in fossil lineages. Scientific observation would indicate that natural selection can make limited changes in living organisms and even form new species. It is the limit of such changes by natural methods that should be questioned.

The French scientist Jacques Monod was awarded the Nobel Prize in 1965 for his work on understanding the replication of DNA. In his 1971 book *Chance and Necessity* he makes strong statements about his observations on the stability of the DNA replication process because of its unique chemical nature. Replication errors in the DNA of a living organism are not usually desired. Most often they are harmful to the organism. Major development of animal lines (especially above the species level) by mere random DNA replication errors is a highly questionable and improbable process. There is little problem believing that natural random mixing and selection in established genetic material can produce new species. However, to conclude that such a process is the central mechanism that has made the major changes in complex lines of fossil organisms is unconvincing. Such a process is so statistically unlikely it is difficult to believe that it is so readily accepted by the scientific community. Making it the basis for faith is untenable.

One can compare what one finds in the fossil record of animal lines with automobile development as previously mentioned. Often small changes occur from year to year in automobile models. In some years, however, major changes are made. Completely new models are created. In some cases, there may have been models one would call "transitional forms." Often there were not. A similar pattern is found in the fossil record of animal lines. Such a pattern is a trait of an intelligent developmental process.

Another interesting factor is that when someone invented electric lights, hydraulic brakes, alternators, or automatic transmissions these almost immediately occur as "parallel evolutions" across all automotive lines of all manufacturers. Similar things happened in diverse fossil lines. Such occurrences are called convergent or parallel evolution. This is far more understandable from a supernatural intelligence perspective than by random DNA replication errors and natural selection in separate individual lines.

The logic of Jacques Monod...

Jacques Monod gives an exceptionally clear explanation for how chemical changes can be made in the DNA. He marvels at the stability of the DNA replication chemistry. After a clear and precise technical description of the process, he concludes with the following statements. (The bold emphasis is mine, of course.)

Hence the entire system is totally, intensely conservative, locked into itself, utterly impervious to any "hints" from the outside world. Through its properties, by the microscopic clockwork function that establishes between DNA and protein, as between organism and medium, an entirely one-way relationship, this system obviously defies any "dialectical" description. It is not Hegelian at all, but thoroughly Cartesian: the cell is indeed a *machine*.

And so it would seem that by virtue of its very structure this system ought to resist all change, all evolution. Resist them it assuredly does, and we have there the explanation for a fact which is indeed far more paradoxical than evolution itself: namely, the prodigious stability of certain species which have been able to reproduce without appreciable modification for hundreds of millions of years. (Monod 1971:110-111)

We call these events accidental; we say that they are random occurrences. And since they constitute the *only* possible source of modifications in the genetic text, itself the *sole* repository of the organism's hereditary structures, it necessarily follows that chance *alone* is at the source of every innovation, of all creation in the biosphere. Pure chance, absolutely free but blind, at the very root of the stupendous edifice of evolution: this central concept of modern biology is no longer one among other possible or even conceivable hypotheses. It is today the *sole* conceivable hypothesis, the only one that squares with observed and tested fact. And nothing warrants the supposition - or the hope - that on this score our position is likely ever to be revised. (Monod 1971:112-113)

These are the "sole and only" sources of change only if we arbitrarily, in faith, exclude the possibility of the existence and intervention of supernatural intelligence. If we allow for the existence of the supernatural and its ability to change DNA, all bets are off the table!

A faith in the existence of the supernatural is not disproven by the physical world. Rather, such an intelligence makes the physical world much more understandable.

The physical geological record clearly disproves a complete "from scratch" creation anywhere near 6,000 years ago. We must change our understanding of what the biblical record really is, and what it is telling us, to fit the observed realities. However, the physical record in no way proves that all the changes in animal lines were made by purely natural processes. It would appear that the sexual reproduction system of mixing of DNA followed by natural selection of the results was purposefully designed to automatically introduce change and variety into living organisms. This would prepare them to survive and take advantage of changing natural environments.

One does find natural processes at work in changing living organisms today. This would include the evolution of infectious disease organisms. Such changes are apparently made by natural processes. Simple random changes can drive these changes in simple chemical structures. These are far different than an animal line developing in a progressive manner by coordinated development of body parts over millions of years.

In each cell of our bodies, we have a copy of this fantastic DNA molecule, which though very small, contains the masterplan for every part of our incredibly complex physical body. This, in itself, is an almost unbelievable miracle, and yet it works! We could spend considerable time examining the complexities of this system and how it works. Our physical bodies are complex and marvelous. We should seriously question that they could be put together by purely random and undirected duplication errors followed by natural selection processes. It is far more logical that it took time, knowledge, and creative intelligence to make us what we are.

Humans have an estimated 20,000 genes in their DNA molecules. Their main job is to create proteins. Proteins do most of the work of our bodies. The protein molecules are fabricated from amino acids, according to the instructions encoded on the DNA. Any miscoding of the DNA may cause the wrong protein to be constructed and its function modified or destroyed.

At this stage it may be helpful to remind ourselves of the difference between the construction of living organisms and the construction of human technologies like computers or automobiles. Computers and automobiles are constructed by putting together physical parts, following a physical or mental blueprint. Humans take things and put them together to produce something else. Living organisms are totally different. They construct themselves from raw materials by using their DNA as a blueprint. To change our human technologies, we change our techniques and the mental or physical blueprint. To change living organisms the DNA is changed.

Since the DNA molecule is in every cell of our bodies it must be replicated over and over to have an exact copy in each of our estimated 10 trillion cells (that's 1

followed by 13 zeros!). That chemical replication process has to be exquisitely accurate, and as Jacques Monod concluded, it is.

How has the change in DNA occurred to modify living organisms? By mere random duplication accidents? I would like to compare and evaluate the veracity of this random accident creation process with another analogy. It is an analogy, not a scientific proof, but I think it brings to light a few factors that need to be considered.

The analogy is between a modern computer program and the DNA molecule. Such a program is written as a series of commands that tell some physical machine how to function. It may, like DNA, contain many thousands of individualized, complex, sequential instructions.

Once written such a program can be duplicated over and over by a computer without error. This is similar to DNA replication in a living organism. Also, like DNA replication, a computer may rarely make an error in copying the program. This error may occur in only one obscure portion of the program, or it may occur in a key function. How likely is it to improve the program? Most likely it will be detrimental to the functioning of the program. Under rare conditions it may not greatly affect the program. But how extremely rare would it be that it would improve the program's functioning?

Such a random error introducing process is at the base of natural selection theory. Many scientists conclude is how all living organisms were developed. Even some believers have been convinced God used such a random system for creation. I find such conclusions unbelievable.

To take the analogy a bit forward, if you were a computer programmer would you replicate a program over and over hoping for mistakes to improve the program? Would you expect such a process to create a totally new application for the program? If you were an employer would you hire a computer programmer who used this method to create new programs?

Is one really to believe that such a random, accidental method produced all the millions of complex living and fossil organisms on earth? How can one have faith in that process?

In addition, is there any physical scientific evidence that it actually happened this way? The short answer is no. That it happened this way is based on faith. There certainly is development over time in fossil animal lines. We can reasonably call that proof that evolution has occurred. The fossil evidence confirms that living organisms were produced through a developmental process that occurred over long time periods. It doesn't explain what caused such an evolution to occur.

Faith that supernatural intelligence was guiding and effecting the major development of living organisms is justified!

Summary

Random malfunction of DNA replication processes followed by natural selection is not a scientifically viable explanation for the extant world of living organisms.

It is difficult for many scientists to even consider the possibility that supernatural intelligence and creativity might offer a better explanation. A believer's faith need not be so restricted. Such faith does not counter the scientific reality of the fossil record. It more clearly defines what actually happened in past ages.

If we allow that learning, creative, supernatural intelligence exists and has been responsible for biological changes over the vast millions, even billions, of years, then the earth's history tells a far more fascinating, meaningful, and reasonable story. It creates a far greater and more significant purpose for human beings. Artificially excluding the supernatural from consideration causes a severe poverty of both faith and rational explanation.

Chapter 4 The Reality of the Prehistoric World

Scientific dating methods work. The prehistoric time scale is true. The earth is not 6-10,000 years old. "Evolving" fossil animal lines for horses, camels, elephants, whales, and hominins are really true. Discounting the reality of these things or berating scientists will not change what is in the geologic and fossil record. A believer must work with the real world and truth, not false beliefs.

By best estimates the earth is somewhere around 4.5 billion years old. There are probably well over 100 different methods used for dating prehistoric times and events. Some methods are used on different types of materials, others for different time ranges, and still others for different environmental settings. Some are more accurate and effective than others in any particular situation. But, when applied properly, they all give generally equivalent answers, not highly discordant ones.

This is not the place to lay out all the evidence to prove these statements. The purpose of this chapter is only to briefly summarize and acknowledge what is really known about the earth's age and fossil record. Many books and museums can verify these conclusions if one simply looks, studies, and does so with an open mind. (I would also refer anyone interested in specific details to my book: *The Bible, Prehistory, and Evolution: Toward a Better Understanding,* available free at https://www.Bible-Prehistory-Evolution.com.)

The story of change and "evolution" in the life forms on a developing earth

The earliest fossil evidence of living organisms can be traced geologically to about 3.5 billion years ago. By about 550 million years ago fossil life forms were diversified and had become abundant in many sedimentary rocks deposited at that time.

One of the oldest fossil organisms that is almost identical to those living today is the brachiopod, *Lingula*. Similar forms are found in strata that are about 460 million years old. Such ancient fossil organisms that are very similar to living organisms are often called "living fossils." These include forms like cockroaches (320 million years old), dragonflies (300 million years old), and crocodiles (200 million years old). Mosquitos show up in the fossil record about 70 million years ago. Snakes about 100 million years ago. Grapes appeared about 66 million years ago. Horses began their development about 55 million years ago. Early camels begin to be found about 45 million years ago. Elephants 35 million years ago. The first whales show up around 50 million years ago.

The "living fossils" that show very little change over millions of years are more the exception rather than rule in the fossil record, however. Most of the larger

vertebrate animals show considerable change since the time of their first appearance as fossils. Four classic examples of living mammals that have done so are the horses, camels, elephants, and whales. These forms show significant developmental change or "evolution" during the last 35-50 million years.

Many insects tell a slightly different story. Consider the amazing common dragonfly. It is a hugely successful organism found on all the continents throughout the world. It has been found as a fossil with its fully developed capabilities and complex life cycle about 300 million years ago. That's before dinosaurs even existed!

Producing an original dragonfly would have required exceptional coordinated events of near "miraculous" proportions! How was the original basic complex, self-reproducing, structure of the dragonfly formed? How were its fantastic vision, flying, feeding, and coordinated maneuvering abilities, not to mention its incredible life cycle, built into it by simply changing the protein constructed by its DNA? Was it by mere random errors in the production of proteins followed by natural selection of the results? How could a protein produced by error do a specifically needed job at just the right time? Such questions greatly weaken, if not destroy, faith in natural selection as the primary creator.

While the original creation of successful dragonflies by the natural selection process stretch credibility, this process likely produced much of the variety, including new species, in modern dragonflies. Natural selection does work but has reasonable limits. There are now estimated to be over 6,000 species of dragonflies alive today, but they are still basically dragonflies with their similar appearance and life cycle.

Similar questions could be asked of thousands of similar organisms in the living and fossil record. Common insects like silverfish, damselflies, cockroaches, crickets, and grasshoppers have been around in recognizable form for hundreds of millions of years without significant major change in form or apparent lifestyle. The clam-like brachiopod *Lingula*, as mentioned, has made virtually no change in the 460 million years of its existence! These all witness to the general chemical stability of the DNA replication process. Something special has to take place to alter and improve an organism in a major way.

Reptiles occur in the fossil record long before mammals. They have a multiple boned lower jaw and a significantly different hearing mechanism than mammals. It is generally concluded that in creating the basic mammal structure, the extra bones of the reptile jaw were "moved" to become the bones of the mammal inner ear, leaving a single bone in the lower jaw. This seems to be a logical and rational design possibility, but what is the chance of it ever happening by mere random errors in DNA replication and production of different proteins?

This is a miracle of coordinated multiple change that requires incredible coordination of development. Was only random chance and necessity at play here? How were all the intermediate steps driven? How did the muscle connections to the bones develop? How were the nerves connected to the brain developed by mere random changes in how single proteins were formed when the DNA replicated? Intelligent, supernatural direction, and creativity cries out for acceptance for such a thing to happen!

Other incredible transitions that could be examined with similar questions are the development of the amniote egg in the vertebrate line, the vertebrate eye, and bird feather development. Some development stages of these features may be found in the fossil record, but the real cause of the change cannot be proven by the fossil evidence.

The natural origin of species

Natural selection does work to modify organisms that have fully developed DNA programming that allow them to reproduce themselves. Much evidence from the natural environment could be cited to prove this point. Some of this is the evidence that Charles Darwin observed years ago. It changes living organisms in many ways which results in considerable variation. It would seem most logical that this capacity for variability was built into the original DNA programming. Although limited change may indeed result from chemical mutation or replication errors.

There is clear evidence for some developmental change of animal species by natural processes. 6,000 species of dragonflies and 350,000 species of beetles would seem to be at least partially the result of natural processes. The evidence for the origin and major development of living organisms, however, begs for the application of external intelligence during the process, not mere random natural forces.

Artificial selection by humans has produced a great variety of dogs. In most cases it would appear that the DNA was not necessarily chemically mutated, rather that changes were made by selecting and combining different mixes of extant DNA. The sexual mixing process is a built-in system changer that provides for variety in living organisms. This, of course, does not totally exclude the possibility that some change may indeed be caused by DNA malfunction or mutation.

The human-like hominins began to show up in the fossil record three or four million years ago. They progress through forms like *Australopithecus*, *Homo habilis*, *Homo erectus* (or *ergaster*), *Homo heidelbergensis*, *Homo neanderthalensis*, and *Homo sapiens*. At the end of the process, incredible thinking human beings have been produced. Modern human cognition is next to miraculous. Humans may be animals but what incredible animals they are!

Humans must be very special. Human cognition has almost "spiritual" qualities that resist scientific understanding. This makes the existence of God and a supernatural intelligence even more plausible.

Consider how four well known types of mammals have changed substantially during the last 50 million years... Horses changed dramatically in feet, teeth, and size. Camels varied more dramatically in body size rather than in significant tooth and foot design. Elephants have significantly changed in their skull, teeth, tusks, and size. Whales changed most dramatically of all, and in nearly all of their features. These changes are features of fossil reality, not mere story, theory, or hypothesis.

However, there is not sufficient fossil evidence to prove **how** these changes were actually made. Scientists are more willing to postulate and accept untestable natural causes, like random DNA mutation and natural selection, because of their faith and strong aversion to even suggesting the presence or influence of supernatural intelligence. But purely natural physical causes for the changes are simply scientifically untestable and rationally unbelievable. There is insufficient fossil evidence for scientific testing the cause. However, there is abundant fossil evidence that proves these animal lines did go through very significant changes over time. In this sense a developmental process or evolution is true. The cause of that development and evolution is the real question.

Expanded graphic presentation of the specific changes in these animal and hominin lines is available in my online book previously mentioned.

These four animal lines are only a very small fraction of the immense fossil record, but they illustrate a true picture of what is in that record. These important facts need to be correctly correlated with the biblical material for the Bible to remain the center focus of faith. One must accept the true facts of geology, paleontology, and archaeology!

I believe rejecting supernatural intelligence, both good and evil, in evaluating the earth's vast history is a serious mistake. It may restrict a true understanding of what has actually taken place during this vast developmental process. Major changes may have happened for intelligently driven reasons rather than being mere natural accidents, which is the conclusion of an exclusively materialistic approach.

The spiritual forces noted in the Bible suggest that there was much more going on in prehistoric time than that which the physical record alone reveals. A key part of that revelation is the explanation for both good and evil supernatural forces. All has not been peaceful and congenial in the past, nor is it today. A rebellion against what is good by evil is strongly implied. How many millennia ago this disagreement started is not indicated. The physical record may give us some hints.

Reptiles were the dominant land and sea animals in the Mesozoic time period between 250-66 million years ago. The dinosaurs lived during these times. There existed approximately 17 different orders or types of reptiles. It has for good reason been called the "Age of Reptiles." Many of these were giants. The time period generally ended rather abruptly about 66 million years ago, apparently with the crash of an asteroid at Chicxulub crater in the Yucatan Peninsula of Mexico. The resulting environmental disruption witnessed great changes in the living organisms on earth. After this time there remained only four orders of reptiles still living ... alligators and crocodiles, snakes and lizards, turtles, and an obscure group, the rhynchocephalians. Why did such a decrease in reptiles occur that allowed for the expansion of mammals? Was this an accident or was it an orchestrated event? Was this an intelligently designed change of direction for life on earth for a significant reason or purpose?

After the demise of the dinosaurs and other major reptile lines, the mammal lines came into prominence. These went through major progressive changes in many different lines over the next 66 million years. Some of these lines are now extinct, others continue.

Birds are an interesting story. There are good reasons to consider them to be the continuation of the use of reptile DNA. Many changes have occurred in birds that make them appear anything but reptilian. They are warm blooded, are covered with special aerodynamically perfected feathers, have much lighter bones, and they fly with finesse.

What are some of the obvious reptilian features birds continue to have? They have a similar foot structure to some of the "birdlike" dinosaurs, their lower jaws are composed of multiple individual bones like the reptiles, and their skulls are linked to the backbone by a single ball joint or condyle. Mammals have a single bone in their lower jaw, a double joint or condyle connection between the skull and backbone, and a considerably different foot structure. These features are strikingly different when seen in modern or fossil skeletons.

Understanding the forced "tree of life" conclusions of phylogenetics.

Phylogenetics is a system, often computer-based, for evaluating the genetic relationships among living and fossil organisms. The basic premise upon which it is structured is that all life forms have evolved from other organisms by purely natural, physical methods. This is the traditional "tree of life" conclusion. This presumption forces the organisms being evaluated to fit into such a "tree of life" form. The evaluation can be based on observable similarities and differences of organisms (morphology) or on their molecular similarities and differences or both. The built-in bias of the program can give a false impression of scientific verification for such phylogenetic evaluations.

The key thing to remember is that all phylogenetic programming is based on the required assumption that all life evolved through lines of organisms that originated from a single organism, and that by purely natural, physical methods. This forces all living organisms to be related in this prearranged framework and pattern. Genetic relationships determined by phylogenetics are thus forced relationships based on "best guesses" or evaluations. This does not necessarily mean that all the conclusions are wrong. Many living and fossil organisms did indeed come from other organisms, or from the modified DNA of other organisms. Phylogenetics can help reconstruct that history. But it can mislead that derived phylogenetic relationship conclusions are scientific proof that random DNA replication errors followed by natural selection produced them. Such a conclusion has been built into the system for evaluating the data.

The major point being made in this chapter is that many things occur in the prehistoric record that are different than what many believers like to think or believe. Certainly there are truths and questions to be sorted out. But the facts are real and must be accepted when establishing or evaluating faith. Rejection or ignorance of reality and true science can undermine a valid faith.

Chapter 5 Is the Bible Totally and Literally "God's Word?"

Is the Bible the book the fundamentalists think it is? Or is it something different? The Bible is a book generally written by humans relating to their encounters with the creating God. This is not to say it is not inspired. It contains words directly attributed to God, but it is not a book literally written by God. If one considers it the perfectly inspired and literally written "word of God," one sets it up for ridicule and dismissal by critical thinkers, historians, scholars, and scientists.

The Bible is not nearly as simple as having something dictated word for word by a supernatural creator. The biblical material was written, edited, compiled, and canonized by humans. Some of these were inspired, others apparently were not so inspired. Jesus taught with parables which were not meant to be literal, yet His teaching was inspired. Jesus did not take a fundamentalist approach to the scriptures. He said, "You have heard it said, but I say to you..." changing a number of concepts written in the Old Testament scriptures. The inspiration issue is complicated. However, if one finds errors or contradictions of reality in the biblical writings they must be dealt with for what they really are. If there are errors, it is obvious the Bible is not to be taken as the 100% literal word of the supernatural creator. Different parts of the Bible have different levels of veracity and should be understood in different ways. One needs to understand this and find the correct way to answer each question in its unique way.

Interestingly, Jesus wrote nothing in the New Testament even though He was literate. Why this was so seems to be important even though the meaning may not be immediately apparent. The New Testament indicates that He could both read and write. He taught His disciples and left it to them and their followers to write the information we have today. He may not have wanted it so precisely written. The rest of the Bible may have been similarly inspired and preserved.

One must also consider that writing and words are only symbols of true meaning. Perfect communication is almost impossible to achieve with words under the best conditions. Words have multiple shades and varieties of meanings depending upon how they are used. The meanings become altered with the passage of time and especially when translated into different languages. The spirit of the meaning is the important understanding to be conveyed. It is this pure and true understanding that we attempt to convey with words or to discover from words.

Jesus apparently spoke in Aramaic and maybe sometimes in Hebrew. His disciples later committed His teachings to writing in Greek. For our day those writings have been translated into English and many other languages. Were all these steps perfectly inspired? Did the Aramaic words find perfectly comparable words in Greek to convey their perfect meaning? Has the Greek found perfectly equivalent

words in English, and other languages, to perfectly convey the full true meaning? Having multiple translations that differ considerably in precise meaning, this is doubtful. This does not mean that we cannot understand the general spiritual intent and meaning in an adequate or sufficient way by comparing many parts of the Bible. Understanding is possible if one is led by a humble and teachable spirit of truth.

Paul's statement in 2 Timothy 3:16 "All Scripture is given by inspiration of God" is often cited as proof that every word of the Bible is perfectly and directly inspired by God. At best this would only apply to the Old Testament because that was the only "Scripture" of Paul's time. On a leap of faith Paul's statement is often applied to the subsequent New Testament scriptures as well. Inspired, the scriptures may well be, but the problems and contradictions clearly show they were not perfectly written, totally literal, and without error. The statement Paul made was an informal general statement made to Timothy for his personal admonition to follow the Bible's inspired principles. It should be concluded that this was not a definitive, all-encompassing theological statement about the origin of the whole Bible as it is often taken.

In the New Testament Paul generally quoted from the Septuagint version of the Bible. This was probably the translation that Timothy was also using. Was this translation the one that was perfectly inspired by God? It differs from the official Jewish Masoretic text in many places and in significant ways. They could not both be "the perfectly inspired word of God." But they are both adequate for "inspired" instruction on how to live righteously. One would have to make a questionable human decision on which text should be considered the "god breathed" Word of God.

Another scripture that is often quoted out of context to prove the whole Bible is the directly inspired "Word of God" is John 17:17.

John 17:17

Sanctify them by Your truth. Your word is truth.

When read in context it seems clear that Jesus was saying that God had given Him words to convey to His disciples and that He had conveyed those words. In His prayer He is simply saying that these words of God are "truth." To extrapolate that this statement was meant to apply to the whole of the Old Testament scriptures seems to be an enormous extension of the meaning beyond that which was stated.

If one finds errors or contradictions within the writings themselves or contradictions between the writings and the physical facts of history, archaeology, paleontology, and geology, the writings are not to be taken as completely literal,

perfectly dictated, or totally inspired by a God of truth. One must look for a better understanding of the Bible's origin, inspiration, and interpretation.

We evaluate the individual parts of the Bible with all possible resources to know how they are to be best understood. If one is thoroughly indoctrinated with a fundamentalistic approach to the Bible, retooling one's mind to take a different approach is difficult. It is against the conscience of many fundamentalists to even consider that there may be errors or contradictions in the Bible. Many fight this reality tooth and nail. Retraining the conscience is a serious part of the process of repentance and change when encountering newly discovered truth. This takes time. Truth is the major tool we must use to make such evaluations and changes.

Faith must be as close to the truth as one can get. The truth we know must instruct our faith. When religious concepts have been proven to be false, they should be modified or discarded. Emotionally this feels wrong. We tend to think that all faith should be rigid, firm, permanent, and never changing. Faith always needs to be corrected by truth when it is found to be wrong. Otherwise, our faith and understanding gradually become out of date and obsolete. Many churches end up with obsolete faith because they are unwilling to modify their faith with truth.

Writings in the Bible that are not literally true.

Do the Genesis Creation and Flood accounts of the Bible match with truth from geology, fossils, archaeology, and history? The simple answer is no, they don't. The Genesis stories and history may have been inspired for the time of its writing, but not for "all time." The stories may be considered "parable type" teaching stories that were added by someone to explain how God created the earth, living organisms, and humans for a society that had little true scientific or prehistoric understanding. In this sense they may be considered "inspired" for their time. Indeed, they have been effective for introducing the biblical writings for two thousand years until a true knowledge of prehistory has developed.

The early Genesis stories and history seem to be based on the understanding of history and science in Mesopotamian culture at the time they were written. The stories may correctly explain the spiritual concept of God as creator and correct moral values, but they are definitely not literal "this is how it was done" stories. I might suggest that the flood story was added to give credibility to the text considering that there were Mesopotamian flood accounts at the time that would have been viewed as true history.

Who wrote these Genesis stories is not known. They have, however, been retained, and have been useful for introducing the rest of the biblical writings for nearly 3,000 years. Until a true modern knowledge of prehistoric realities became known they were assumed literal and true. This assumption has lasted too long. They contain valid moral and spiritual teaching. But if taken literally they become

a contradiction of reality and a stumbling block to those who have a modern understanding of prehistory. Modern understanding of geology, paleontology, and archaeology prove they cannot be literal stories. The apostle Paul's statement in 1 Corinthians 13 applies here, "When I was a child, I spoke as a child, I understood as a child, I thought as a child; but when I became a man, I put away childish things."

Being a false witness to truth is contrary to one of the ten core moral principles of the Bible. Unknowingly making these parable type stories absolutely true history makes them a false witness of true history. Allowing them to be parable type of stories eliminates such an inconsistency. The earth and all living creatures were not created from scratch 6,000 years ago in six days as implied in Genesis 1. Nor did Flood waters cover the whole earth sometime around 2350 BCE. These may be parable types of teaching stories, but they are not literally true stories of history.

Some of the stories in Joshua and other early biblical books would seem to fall into a somewhat similar problematic situation. Who wrote them and who added them to the biblical collection are legitimate questions. Many Bible-believing archaeologists have sought to prove the story of Jericho and several other stories in the Book of Joshua but have come up empty. Sincere professional archaeologists of sincere faith have sought to prove their faith in these biblical scriptures by evaluating the archaeology at several of the sites. The facts on the ground simply do not match the stories as they are written. Maybe there are other explanations, but it would seem that someone fashioned some of this "history" from legends or suspect stories at the time of writing.

These errors in the text could not have been known until modern archaeology reached the technical level it has. Of course, even now archaeology rarely offers us absolute proof of past events so we must be careful. We should, however, accept what we find to be most likely true and reject the most likely error. We must critically evaluate the biblical writings with the best truth we can obtain.

We must not, however, go to the other extreme and emasculate the Bible with a materialist's razor, or allow ourselves to be swayed by the ideas and philosophies of biblical antagonists and minimalists who create historic fabric out of their own imaginations, evaluations, and philosophies.

Evaluating the inspiration of the Bible

There are histories in the Bible of early individuals like Abraham that seem to have been recorded a long time after they lived and based on memory stories about them. For many of these it is hard to know what is fully true and what is enhanced "story." We must be comfortable allowing some of these to remain open questions and not require them to be absolutely literal. It is important to have

critical scholarship evaluate such things. Of course, scholars can be wrong, and it is necessary to critically evaluate their work as well. A cynical critic is not the way to do this. Such usually produce biased and questionable evaluations.

Finessing how to understand the whole Bible is a challenge. No one approach applies to the whole book. This may be a problem for those who prefer everything to be black and white or cut and dried in a simple and perfect way. But life, the world, and the Bible are not that way. Jesus indicates that the "spirit of truth" is a major key to understanding. He also indicates that following the truth may be a narrow and difficult path that many will not find and follow.

We can also learn a lesson from my gold panning hobby... In any pan there will be a multitude of things that are not gold, and one might be tempted to toss the whole pan's contents away. However, if a small nugget or flake of gold is seen in the bottom of the pan one does not throw out the whole pan because most items in the pan are not gold. Rather, one carefully washes out the common rocks and other objectionable materials to separate and retain the gold. Of course, it is axiomatic that one must not confuse fool's gold and true gold. Using similar principles, we extract the golden meanings from the Bible.

Jesus told his disciples that they were not able to take the whole truth he wanted to give them during the time he was with them. What all this included we cannot know. But he did not try to give them total understanding of everything at the time. He said that the Spirit of truth would guide them into the truth in days to come (John 16:12-13). The Bible teaches that truth is the central and core value. Why would a religious person not reject error when it is found in parts of the humanly assembled Bible? Jesus did not say that all the Hebrew scriptures were the direct, inspired, and literal word of God. Many fundamentalist Christians have adopted this latter belief. Such apparently was the belief of the Pharisees of Jesus' day if we are to believe the writings of Jewish historian Josephus. And, as such, it may have been the Pharisees' belief, as well as Paul's who was a Pharisee. Pardon the use of a secondary reference from Frank Moore Cross but it makes this point most clear.

This dogma of the *Hebraica veritas* already found expression in Josephus's apologetic work, *Contra Apionem*, penned between 94 and 100 C.E.: "We have given practical proof of our reverence for our Scriptures. For although such long ages have now passed, no one has ventured to add or to remove, or to alter a syllable; and it is an instinct with every Jew, from the day of his birth, to regard them as decrees of God, to abide by them, and if need be, cheerfully to die for them" Even when it is recognized that Josephus not infrequently over stated his case in propagandizing a

Greek-speaking audience, one must still affirm that he regarded the Hebrew Bible as having, in theory at least, an immutable text. (Cross 2000:205)

One should consider that such belief seems to be that of the Pharisees of Jesus' day. His conclusion on the Pharisees' faith was that "They are blind leaders of the blind" (Mathew 15;14). This is hardly a recommendation to follow their belief system.

The primary value of the Bible is that it contains the important history of human interaction with the supernatural creator. This faith should not be short-circuited by adopting a faith in a fundamentalistic interpretation for the entire Bible. Many non-Christian religions give similar fundamentalistic status to their humanly written scriptures. It is a human thing to do, but believers in the God of the Bible should not.

One of the most important and helpful concepts that I was taught in my early conversion to my present belief system was that organized religion can retain many errors. Since then, I have found that the development process of religious groups virtually guarantees they will freeze errors into their group beliefs. Early conclusions and beliefs which are adopted but that later prove to be wrong cannot be easily removed when the group matures. It becomes a part of their traditions, "group think," and "group faith." I was fortunately taught to critically examine such beliefs and traditions and to have the emotional, moral, and intellectual courage to reject them if they were found to be wrong. These principles even apply within my own religious group.

Conclusion...

If one interprets the total Bible as the 100% literal and factually true, inspired this way by God, one sets it against physical evidence from history, geology, paleontology, and archaeology. The earth and living organisms were not created 6,000 years ago, in seven days from a formless mass. The earth has a long and varied physical record of existence in both the Old and New Worlds that is extremely clear. Modern humans have been on earth for thousands of years prior to 6,000 years ago, again in both the Old and New Worlds.

There is no evidence anywhere that a worldwide flood occurred around 2350 BCE. (Bishop Usher's biblical based chronology places the flood at 2349.) There is no evidence that such a flood even covered the Mesopotamian area near this time. In fact, abundant evidence is found disproving both scenarios. In Mesopotamia, far from being emptied of inhabitants, it was the time of the rise of that world's first empire under Sargon of Akkad who subdued many existing city states to develop his empire. His sons reigned after him in this empire that lasted 141 years

(2334-2193 BCE). It was followed by the Third Dynasty of Ur. Mesopotamia was not emptied of inhabitants by a flood.

The archaeological evidence is clear. The evidence indicates that the creation and flood stories may be parable-like teaching stories being "inspired" and making sense at the time of writing, but they are not literal history. (Greater details of the problems involved can be obtained from *The Bible, Prehistory, and Evolution: Toward a Better Understanding* at https://www.Bible-Prehistory-Evolution.com)

One must understand the Bible for what it really is. Only then can it stand head and shoulders above any other book we humans have. We must acknowledge that there are some contradictions and errors, as well as, a number of stories that are not to be taken as literal history. If we have faith that the Bible is something that it is not, and never has been, we may face a crisis of faith when we discover what is actually true. Many fundamentalist believers take the reverse position of condemning and rejecting what is really true in history and prehistory. This destroys the credibility of both the Bible and the fundamentalists themselves.

Chapter 6 Why the Bible Qualifies to Remain the Primary Source for Faith

The facts of the physical world cry out for the existence of a creating intelligence that has designed, constructed, and maintained the complex living biome on earth for over three billion years. The Bible is the prime source that introduces us to a viable, rational, and eternal intelligence that makes sense in relation to the physical world, the human intellect, and spiritual cognition.

The Bible is the door to a valid faith in this Creator. However, it must not be interpreted in a fundamentalistic manner that sets it contrary to history and scientific truth. The Bible contains writing by many inspired humans and perhaps by some not so inspired ones. There is no evidence that it was written or directly dictated by God. It has some human errors that must be admitted and appropriately dealt with. On the other hand, many of the biblical writers reflect direct experience with, and inspiration by, God. Having written records from such people is a resource that must be highly valued.

The knowledge of the supernatural provided by the Bible sheds new light on many prehistoric facts that have previously been interpreted only with a materialistic approach. The Bible reveals there is a more accurate way to understand the past. The biblical revelation, however, is not done in the straightforward, literal way most fundamentalists have assumed. Its revelation is different. The Bible was written by many individuals who related their experience of God in the light, context, and style of their culture. Other individuals copied, edited, and eventually collected the writings of many authors and gathered them together in the book we call the Bible. It was a complex process.

All parts of the Bible were not created equally. Some parts are more accurate and valid than others. Much of the Bible was authored nearly two or three thousand years ago in accord with the knowledge and understanding of the cultures at the time. People write what they understand in light of what their culture teaches them. They may have been "inspired" for their time and culture, but not necessarily for all time and all cultures. Since the writers were products of their culture they must be understood in relation to that culture. Although culture and knowledge have changed dramatically with time, moral values and the eternal creating intelligence have not changed. Most of the moral values are correctly reflected in the early writings even if their actual history is not so authentically presented.

The Bible defines the creating God and reveals the source of evil.

Among all the historic or current "gods" of the world, the God of the Bible is the one most logical and rational candidate for being the intelligent force behind the billions of years old physical and biological world we inhabit.

Above all, the goal and purpose for human life that the Bible, especially the New Testament, gives is the most logical, reasonable, and inspiring of any. That goal is eternal life for all who qualify by developing the right mind and character. Death and permanent elimination await those who continue to follow evil and destructive practices.

Concepts of an ethereal heavenly bliss and of an eternal punishing hell have been read into the Bible, not out of it. These were developed to deal with an "immortal soul" which is not a part of biblical teaching. Those who qualify for eternal life will surely have plenty of interesting and productive work to do in this extensive universe. Those who embrace evil rather than the right character will simply be judged and eliminated.

Evil is an enigma in the world. Somewhere along this 3.5-billion-year sequence of developing life, evil entered the picture. While evil is readily apparent in the world its source is not. A God of love and good counters existing forces of evil. So where did evil come from? The Bible gives a few hints of this, as may the fossil record. On this too, the Bible suggests insight and reason. The Bible describes a created spiritual being who had a better idea and rebelled against the righteous ways of God, introducing evil into the creation. While this is rational and reasonable, it is not scientifically provable. It is another faith issue.

A most reasonable purpose for temporary human life

This temporary human life allows humans to personally experience the difference between evil and good, often by much personal suffering. They witness the results that each type of behavior causes. A choice between the two ultimately has to be made. One leads to life, the other to permanent elimination and death. All humans have perpetrated evil against others, as well as experienced the effects of evil. For those who want to change from doing evil and chose to do good, the Bible provides a path for repentance and moving forward. Such "repentance" or turning away from evil and to the right ways of life, allows one to change and choose behavior that leads to eternal life. Apparently, there is an ultimate justice that requires a penalty for doing evil to others that must be paid... "The soul that sins shall die." By biblical definition the sacrificial death of Jesus for those who repent and change their way of living fulfills this requirement. This eliminates both the ultimate death penalty and the guilt for past evildoing. It clears the conscience to move forward in a positive way to pursue the righteous ways that lead to eternal life.

A summary of the Bible's moral guidelines

It is the Bible's revelation of the purpose for human life, its moral laws, teaching, and guidelines that are truly inspired and set it apart. These give it perpetual value for directing our relationship with the creating Intelligence, with one

another, and with the physical earth. Its greatest benefit is giving authoritative guidelines on how to live and qualify for eternal life!

The Bible provides this authoritative moral guide that promotes sustainable relationships in society. An effective society cannot be built on a moral base that allows every individual to act in a way that is only defined by, and acceptable to, themselves. There have to be group standards that are based on an accepted authority for a society to function benevolently and effectively. The Bible provides a valuable set of such standards. Science has proven incapable of providing society with authoritative moral standards that all will accept.

There are a variety of ways one could outline a summary of the Bible's basic moral guidelines. Let's examine a very simple one.

There are two main overarching principles. The first is respect and love for the Creator. The second is respect and love for all fellow human beings. The Ten Commandments give the basic guidelines on how to do this. The New Testament clarifies and adds completeness to these basic principles.

The New Testament concepts can be summarized with the following terms and phrases: love, joy, peace, patience, kindness, doing to others what you would want done to you, faithfulness, meekness (humility), self-control, living a productive giving life, faith, hope, knowledge, understanding, wisdom, justice (integrity), mercy (forgiveness), thankfulness, obedience to legitimate government, and diligence. Of course, some overlap and intertwine with one another.

These principles provide a successful and sustainable life for oneself, one's family, and for society. By New Testament guidelines their practice is the requirement to be given eternal life.

A few modern Christian groups have benefited greatly from their respect of these biblical principles, even if some of these groups were assembled by questionable ideas, doctrines, or leaders. Certainly, none have followed the biblical guidelines in a balanced and complete way. On the other hand, many other groups have so distorted the meaning of the biblical guidelines that they have made life miserable for their members. By misunderstanding and misapplying biblical guidelines and pushing them beyond reasonable limits, they have caused much human suffering.

What about biblical miracles?

An important objection to the Bible in relation to modern science is its reported miracles. The anti-miracle philosophy of Scottish philosopher David Hume (1711-1776) had a great impact on the thinking of his day, and it continues in much of the academic community to our day. Thomas Jefferson, under the influence of this anti-miracle philosophy, rejected all the miracles of the New Testament. He saw

the great moral value and wisdom of what Jesus taught but rejected the miracles. He constructed his own book of gospel stories or "Bible," commonly termed the "Jefferson Bible," by retaining the moral principles and teachings of Jesus but eliminating all the miracles associated with his ministry.

The ultimate question is, "Does a supernatural or spiritual realm exist?" For humans this is a faith question, not a scientific one as was discussed in earlier chapters. Since science can neither prove nor disprove this question, why should one look to science for the ultimate and definitive answer? How can a scientist or materialist philosopher have the final conclusion on a matter that cannot be evaluated by physical, scientific methods? Can anyone absolutely prove their conclusions on origins? Or don't we all have to "live by faith" and make many judgments based on that faith? But one would be foolish to live by a faith that contradicts valid and provable scientific evidence.

If a supernatural realm really exists, the question of miracles takes on a whole different perspective. Human beings, because of the incredible power of human cognition, can intervene in physical processes, to cause change. If supernatural forces exist, it should be no great surprise or "miracle" that such forces can also intervene in natural processes far more effectively than physical humans can.

A person who actually witnesses a true miracle has the right to an opinion. However, such a conclusion must be open to critical evaluation to avoid religious self-deception. There is an abundance of such deception in many religions. The overly religious person who "sees" many miracles presents a question of truth and validity that must be evaluated. Such a person should seriously consider whether they are a true witness to what has really happened, or a false witness based on highly questionable, or emotional evidence. How such a person, if dedicated to not bearing false witness, can so glibly and without conscience tell unproven and unprovable conclusions is a bit of a mystery. One should not be a false witness for God's sake. It is a contradiction of spiritual values. It breaks a basic commandment. This is not the type of "miracles" being addressed here.

By faith one may believe the miracles of the New Testament were real. A miracle may be something different than what many believe. A miracle is something that doesn't happen under normal circumstances or according to known causes. Airplanes were miracles to many aboriginal people when they first saw them. Radio, telephones, TV, or Wi-Fi would likewise be incredible miracles to such people. Because we understand the scientific principles by which they function they are not miracles to us.

What is a miracle? I would suggest that a miracle is something for which we do not currently understand the science or power producing it. The supernatural is by faith rejected by many scientists. It is accepted by faith by believers. The supernatural, as understood by most believers, certainly has the power to

influence and manipulate physical material. This is not an unreasonable belief, even if it is not understood how it can scientifically work. It is outside the science box.

We have reason to believe the witnessed miracles of the New Testament were real because of the lasting impact they had on people like Jesus' disciples and the Apostle Paul. They are usually discounted because of the lack of a known scientific cause. This is understandable. The general scientific community's faith conclusion is that there is no supernatural realm. However, if there is a supernatural world it would seem incomprehensible that such a supernatural force could not impact and cause things to happen in the physical world. Afterall, cognitive human actions change the physical processes of the world all the time.

The New Testament writers reported things that they witnessed whether they could be physically explained or not. They were motivated for the rest of their lives by what they witnessed. This is meaningful even if the witnessed events cannot be "replayed" or scientifically proven.

The apostle Paul comes into the New Testament story as one who was hostile and antagonistic to the Church, its understandings, and its teachings. He was violently attacking the Church. He was a willing witness to the stoning death of Stephen. He was so offended by the Church before his conversion he was having followers of this way put into prison. He obtained permission from the high priest to go to Damascus and drag men and women believers back to Jerusalem for punishment. On this trip he was blinded and given a converting miracle encounter with Jesus that brought him into the Church he previously hated. This turned his remaining life around 180 degrees. Was this real? If not, why would he dedicate the rest of his life to such a false and made-up purpose that countered much of what he had been taught during his earlier life? Why would he live a life of suffering and ultimately death for the cause if he were not convicted by what he experienced?

Considering the "miracle" of Jesus

Jesus was a historical person of great significance. Even if one were to reject all the miracles of healings, wine making, raising the dead, casting out evil spirits, etc. of the Gospels, **the spiritual genius of Jesus** would remain a significant, unexplainable factor of reality. Where did this insignificant individual, the presumed son of a local builder, having four brothers and at least two sisters, literate but academically unschooled, from a backwater area of a small country that was dominated by the Roman Empire, get such a depth of spiritual understanding? His spiritual teachings not only put to shame the contemporary religious leaders but also became a defining "moral standard" for much of the Western World. Is this not indeed "a miracle?"

It is interesting to note that Jesus was not a fundamentalist. He had a different approach to the Hebrew scriptures than the Pharisees. He updated, clarified, and changed many concepts written in those scriptures. He said, "You have heard it said... but I say to you..."

To conclude...

The Bible provides answers to many otherwise unanswerable questions about the supernatural, origins, and the purpose of human life. It may also shed important light on the distant prehistoric past when understood correctly. Such a valuable source must not be short-circuited by a fundamentalistic approach to it. A true history of the earth, all 4.5 billion years of it, can only be understood by accepting the true physical record and not falsifying it by a contradicting interpretation of early Genesis or other parts of the Bible. A true biblical faith must not be an illogical, anti-scientific faith.

The extended developmental creation process found in prehistory was directed by supernatural intelligence. It ultimately produced high level sentient human beings. Our solar system, in this apparently backwater section of the universe, may be considered a nursery to supply future intelligent beings to administer other parts of the universe, effectively and benevolently.

The Bible, especially the New Testament, defines how humans, by developing the right character, can qualify to be given eternal life, becoming supernatural beings. This, I believe, is the true purpose for humankind and the ultimate story of the Bible. When seen in the light of modern scientific understanding it is far more logical, mind expanding, and motivating than any materialistic fiction! When understood correctly this creditable biblical source reveals an eternal, intelligent, creating God with a rational and meaningful goal for human life. Such an understanding justifies and is worthy of faith!

Chapter 7 Critical Conclusions

- 1. We exist in an incredible universe that is without a scientifically provable origin. Physically, we cannot explain how something came from nothing. This doesn't stop scientists and philosophers from giving complex and mentally challenging suggestions for origin. These complex explanations may intimidate many, but other equally gifted individuals totally disagree and present alternative conclusions this reveals the uncertainty of the previous explanations. The truth is we do not know and cannot scientifically determine the origin. Faith is not an obsolete concept. Faith is a necessity for all humans to explain origins and confidently move on with life.
- 2. The conclusion that all living and fossil organisms, including humans, were created by random chemical accidents that were later formed into viable living systems by natural selection is unreasonable and is not scientifically validated. Facts from the fossil record cry out for the existence of a supernatural creative intelligence and guiding of the developmental processes. The most logical and reasonable supernatural Intelligence in our human experience is the supernatural intelligence revealed by the Bible.
- 3. A fundamentalistic understanding and interpretation of the Bible misleads. Scientific facts from geology, paleontology, and archaeology prove that not all biblical statements are to be taken as literal history. Truth must be central to a viable faith and worldview.
- 4. A valid faith is necessary for a person to live an effective and successful life. When properly understood, the Bible provides such a meaningful faith that can be easily understood by individuals of all intelligence levels.
- 5. Evil and good need simple, practical, and effective definitions. The Bible does this in many ways. The Ten Commandments. The Old Testament laws for a benevolent and effective society. The Proverbs. Jesus' teachings. Teachings of the Apostles and Paul. All these lead to a clear and balanced understanding of good and evil.
- 6. The Bible, in its unique, complex, and varied way, provides answers. It reveals who put us here, why we are here, hope for the future, and how we should be living to obtain that future. Truth must always be the final arbitrator. Correct and balanced understanding of the complex and varied writings of the Bible is not a simple or easy task. It is a lifetime pursuit. It must be led by a balanced, humble, and loving spirit of truth.

7. We must be satisfied that we cannot, do not, and will not know everything. Faith and hope are necessary. A true and valid faith in the God of the Bible will guide us through imperfect knowledge and understanding to a successful life.

References

Cross, Frank Moore

2000 From Epic to Cannon. Johns Hopkins University Press, Baltimore.

Darwin, Charles

1958 *The Autobiography of Charles Darwin 1809-1882*. W. W. Horton & Co., New York.

Dawkins, Richard

1987 The Blind Watchmaker. W. W. Horton & Co., New York.

2006 The God Delusion. Houghton Mifflin Co., New York.

2009 The Greatest Show on Earth. Free Press, New York.

Harris, Sam

2005 The End of Faith. W. W. Horton & Co., New York.

Lewontin, Richard C.

1998 The Evolution of Cognition: Questions We Will Never Answer. In *Methods, Models, and Conceptual Issues*, vol. 4, edited by Don Scarborough and Saul Sternberg, pp. 107 – 131. The MIT Press, Cambridge, MA.

Monod, Jacques

1971 Chance and Necessity. Alfred A. Knopf, New York.

Polkinghorne, John

1994 The Faith of a Physicist. Princeton University Press, Princeton, New Jersey.

Shermer, Michael

2000 How We Believe. W. H. Freeman and Co., New York.

2006 Why Darwin Matters. Henry Holt and Co., New York.

Wilson, Edward O.

2014 The Meaning of Human Existence. W. W. Norton & Co., New York.