

BIBLICAL NATURALISM: A TIME FOR PARADIGM CHANGE

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ABSTRACT

The question of origins has always been an important part of the world view philosophy of humans. Most people in Western civilization used the Biblical account as the basis for their view of origins until the mid nineteenth century. From the 1850's to present there has occurred a constant decline in acceptance of the Biblical Creation view and a complementary increase in naturalistic evolution as the basis of their world view. Most educated people today have adopted the evolutionary naturalism paradigm.

Those who believe in the inspiration of the Bible face a dilemma. On the one hand, they believe that God created the universe including man, who as the most special part of creation was made in God's image. On the other hand, their formal educational training has taught them that all of the "scientific" evidence points to evolution from bacteria to man.

This dilemma is needlessly endured by millions of believers in God. Neo-Creationists must realize the need to present the alternative paradigm based on a creation model of origins in an organized and competent way.

As much of the origins puzzle as can presently be explained by the "Biblical Naturalism" model needs to be clearly identified. Those aspects of the origins puzzle that remain a mystery also need to be identified.

A necessary part of the dynamics of the shift to the biblical naturalism paradigm should be the presentation of scientific evidence for the unreliable and defective nature of evolutionary naturalism.

In this paper we will discuss what a paradigm is, define the biblical naturalism paradigm, and discuss the history of how the evolutionary naturalism paradigm came to be so universally accepted. We will present an analysis of origin science and operational science and primary cause versus secondary cause will also be explained. Finally suggestions for adoption of the biblical naturalism paradigm will be presented.

INTRODUCTION

One may question; why do so many science teachers and professional scientists believe in evolution? Is it because they have seen a great deal of empirical evidence that evolution has happened? Is it because the fossil record is so conclusive in showing gradual change from simple organisms to complex life over long periods of time? Is it even because they have given a lot of thought to investigating the pros and cons of evolution? None of these reasons correctly answers the question. The paradigm that their teachers, from grade school through graduate school taught was either Neo-Lamarckian or Neo-Darwinian evolution. Every textbook, no matter which science they studied explained concepts from a background framework of evolution. The world view that most scientists have been taught throughout their formal education has been based upon the evolutionary naturalism paradigm.

Pierre Teilhard de Chardin, although he lived before the development of the concept of paradigm described well the power and authority of the evolutionary naturalism paradigm.

"Is evolution a theory, a system, or a hypothesis? It is a general postulate to which all theories, all hypotheses, all systems must henceforth bow and which they must satisfy in order to be thinkable and true. Evolution is a light which illuminates all facts, a trajectory which all lines of thought must follow - this is what evolution is." [7]

Henry Morris communicated the importance of challenging the evolutionary naturalism paradigm. "Evolution is not merely a biological theory of little significance. It is a world view - the world view diametrically opposing the

Christian world view. Therefore, Christians ignore it or compromise with it at great peril." [21]

Evolution is not just an important scientific theory, it is much more. It is a philosophy that, because it is built upon naturalism as the source of primary and secondary origins, must leave God out.

"When a paradigm becomes established, it serves as the grand organizing principal for scientific research. This means that it defines the questions that need to be answered and the facts that need to be assembled." [14]

The topic of evolution is not studied directly by most teachers or scientists. It is not a topic they are really interested in investigating. None-the-less, with their educational background, the evolution paradigm is the framework that they use to make sense out of nature. As long as they don't look into the details they are perfectly satisfied with their understanding of nature.

"A paradigm is not merely a hypothesis, which can be discarded if it fails a single experimental test; it is a way of looking at the world, or some part of it, and scientists understand even anomalies in it's terms." [14]

How we understand nature can better be described as gestalts rather than individual observations. We often observe what we expect to see. We expect our observations of nature to fit into a pattern much as we expect the most indistinguishable piece of a jigsaw puzzle to ultimately fit logically in the puzzle. Even anomalies are expected to fit, possibly sometime in the future, when we have a more complete understanding.

EVOLUTION DOGMA

I would describe the formal education of almost all science teachers or scientists as one in which they were prescribed a pair of "rose colored evolution glasses." When, on some occasion these "evolution glasses" are removed, nature doesn't look the same and the person feels discomfort, so they put them right back on. Our friend may have been caught by one of his teachers not wearing his "evolution glasses" and was reprimanded; so in order to avoid discomfort they put them right back on. They may have attended a scientific convention where they discovered that everyone else was wearing their "rose colored evolution glasses" so they decided it would be in their best professional interest to wear theirs as well.

Perhaps they even attended a meeting at the convention where there was a discussion about a group of stupid people who didn't know enough to wear their "rose colored glasses" and naturally didn't have a very good understanding about science. Most professional scientists or science educators have been told, ever since they were young that they were smart. The last thing they want at this time in their life is to be looked upon as dumb by their colleagues.

These are some reasons why most people who work in the scientific fields believe in evolution. It is not because there is a great deal of evidence supporting evolution. It is not because most scientists have put a lot of thought into it. They believe in evolution because it is taught as dogma.

Goethe wrote, "When an erroneous hypothesis becomes entrenched and generally accepted, it is transformed into a kind of tenet that no one is allowed to question or investigate; it then becomes an evil which endures for centuries." [9] A paradigm that is held, despite mounting evidence against it may cause rational people to draw irrational conclusions, because they hold to their paradigm so tightly. "A humorous illustration is provided by the case of the deluded patient who complains to his physician, 'Doctor I'm dead.' The doctor tries to assure him otherwise, with little success, and eventually exclaims in exasperation, 'Dead men don't bleed, do they?' The patient agrees, 'No they don't.' Whereupon the doctor jabs patient the with a needle. As the blood trickles out, the patient sighs, 'OK, I was wrong! Dead men do bleed.'" [23]

The question of origins of the universe and life still occupy the human mind as they have done since the most remote antiquity. "It may be safely said that it is one the most important problems of natural history. No religious or philosophical system, no outstanding thinker ever failed to give this question serious consideration." [19]

How important is it to have a good understanding of evolution? Paul Moody, in the preface of his textbook on evolution wrote:

Organic evolution is the greatest principle in biology. Its implications extend far beyond the confines of that science, ramifying into all phases of human life and activity. Accordingly, an understanding of evolution should be part of the intellectual equipment of all educated persons. [20]

The importance of a proper understanding of origins is explained from a Creationist's point of view.

The matter of origins is not a peripheral issue which can be dealt with after conclusions have been reached on all other issues. This would truly be a case in point of the proverbial cart before the

horse. The matter of origins must be settled first and foremost. On this rest the foundations of everything in between. [26]

My belief is that for most Christians, who have never seriously studied the question of origins, there is much confusion. Many are convinced that the Bible teaches that God was the source of origins, but on the other hand, are also convinced that evolution must be true, because of what they have been taught in school, by television and through books. This conflict in the mind, naturally leads to doubt about either other teachings of the Bible or other teachings of science.

"The relationship between these two claimants on mankind's loyalty - science and religion - is probably the most fundamental challenge that faces the mind and spirit of human beings." [22]

Some scientists seem to have chosen an unnecessary and dangerous solution. They have chosen to check in their religious faith at the laboratory door and their science at the church door. They will eventually have to choose one over the other. If they choose the "religious" side and forget to check in their faith at the laboratory door they are sure to incur the wrath of the scientific establishment.

Ponder John Casti's ridicule of "Creationists" in general and Duane Gish in particular.

Duane Gish holds a Ph.D. in biochemistry from the University of California at Berkeley; he is also the vice-director of the Creation Research Society and a regular participant at university debates on the merits of creation science. Since he is trained in the scientific method, especially in an experimental science like biochemistry, it's odd, to say the least, to read in his book Evolution: The Fossils Say No that 'we do not know how the Creator created, what processes He used, for He used processes which are not now operating anywhere in the natural universe . . . We cannot discover by scientific investigation anything about the creative processes used by the Creator.' With such statements, creation 'science' joins the long list of other perverse modern 'sciences', such as 'fashion science', 'dairy science', and 'educational science', all of which can be conveniently subsumed under the heading 'nonscientific science'. [4]

I have found, if a creationist is poorly educated he is attacked for his ignorance and looked down upon as a person who "doesn't know any better." If the creationist is well educated, like Dr. Gish they are portrayed as an educated person who is not really very smart. This negative attitude is well illustrated by a two paragraph reading I received recently anonymously.

The fact that they are theories does not make them uncertain, even when various fine details are still under dispute. This is particularly true of the theory of evolution, which is under attack from people who are either ignorant of science or, worse, who allow their superstition to overcome what knowledge they might have. [27]

This is an insult to the character of creationist educators and scientists.

PARADIGM CONCEPT

Use of paradigms is a type of deductive reasoning. "If the premises of deduction are true, and our use of deduction is valid, the conclusions must be true, as surely as two plus two equals four." [6]

But what if my premises are wrong? In deductive reasoning truth is unlikely to be discovered if built upon false premises. This is the reason why one's paradigm concerning present day nature and origins in the past is so important. One's paradigm contains the set of basic premises upon which one's ability to reason is built.

"The dominant set of assumptions that underlies any branch of science is called a paradigm, a word coined by the philosopher and historian Thomas Kuhn." [5] A paradigm is a general framework into which many individual theories fit. In this vein they can be thought of as super theories.

"Paradigms govern the way scientists think, form theories, and interpret results of experiments." [5]

In this paper we will use the term, evolutionary naturalism for the paradigm that defines nature in strictly materialistic terms. Carl Sagan described the evolutionary naturalism paradigm in a nut shell. In the opening paragraph of his book, Cosmos, Sagan wrote, "The Cosmos Is All That Is Or Ever Was Or Ever Will Be." [24]

We will use the term, biblical naturalism for the paradigm that posits a supernatural Creator God, who was outside of and not a product of nature was the primary cause for all of nature. The Creator God also set the laws of nature in place. These laws of nature will be referred to as secondary cause.

It was in 1947 that the young Harvard professor, Thomas Kuhn was asked to develop a presentation on the origins

of 17th century mechanics. In the course of his research Kuhn traced the subject back to the great father of the deductive method, Aristotle. Kuhn was "struck time and again by the total and complete wrong headedness of Aristotle's ideas." [4] Aristotle taught that all matter was composed of three parts: spirit, form, and the four qualities: air, earth, fire, and water. How could someone as bright and contemplative as Aristotle be so dead wrong? "Then, as Kuhn recounts it, one hot summer day the answer came to him in a flash while he was poring over ancient texts in the library: Look at the universe through Aristotle's eyes!" [4] The framework for understanding nature in Aristotle's time was not atoms, molecules and energy.

If you adopt Aristotle's world view, one of the presuppositions is that every body seeks the location where by its nature it belongs. With this presumption, what could be more natural than to think of material bodies as having spirits, so that "heavenly" bodies of air like quality rise, while the spirit of "earthly" bodies causes them to fall? [4]

As a result of this enlightenment, Kuhn began to develop the idea that scientists work within a framework that greatly influences how they perceive nature. These views can best be described as "gestalts" which are phenomena of nature so integrated that they compose a functional unit that cannot be derived simply from summation of its parts. In other words, the whole is greater than the sum of its parts.

Kuhn borrowed the term paradigm from grammar and designated it the proper expression for the frameworks or gestalts that are guidelines for scientists as they investigate nature. In 1962 he published his hypothesis in his enormously influential book, The Structure of Scientific Revolutions.

A good analogy of a paradigm is the use of maps by explorers. In ancient times explorers had old well accepted maps which perhaps had the major landmarks such as the largest rivers, tallest mountains and best fishing lakes. As explorers using the old trusted maps would venture out and return they would come back with more information about different streams, mountain passes and better fishing lakes. Some of these new discoveries would turn out to be correct while others weren't to be trusted. As more and more explores would come back with the same discrepancies discovered in the old map there came a time when explorers would not trust their lives to the old map and would now shift their allegiance to the new one because it had better directions, especially to the best fishing lakes.

Paradigms are to scientists what maps are to explorers. Paradigms provide direction in what to explore, what to expect, and even what type of data to collect. When a new paradigm is identified it is not automatically switched over to because scientists trust their current paradigm even with its recognized faults. However just as explorers switched maps, scientists will shift to new paradigms if enough insurmountable problems are identified.

"When a paradigm becomes established, it serves as the grand organizing principle for scientific research. This means that it defines the questions that need to be answered and the facts that need to be assembled." [14]

Kuhn held that science had to be defined in terms of paradigms. He found it interesting to discover the attitude of scientists toward their paradigms. Scientists, it seems merely assume their particular paradigm is the proper framework for understanding nature. Most are neither interested in verifying any further nor attempting to falsify their paradigms. The power of paradigms should be understood. Kuhn proposed that "Science's authority ultimately resides not in a rule-governed method of inquiry where by scientific results are obtained but in the scientific community that obtains the results." [11]

The power paradigms hold helps science consolidate its activities by "preventing the energies of scientists from being dissipated by engaging in interminable disputes over basic assumptions or tackling insoluble problems." [15] Many activities are intended to prevent straying. The scientific community controls: professional training, socialization, availability of grant money, access to research facilities, and publications.

The period during which the scientific community is using the same paradigm Kuhn called "normal science." Sometimes results of experimentation are contrary to what was predicted or even allowed by the paradigm. These differences are referred to as anomalies. Occasionally so many anomalies have been observed that their sheer number becomes alarming and the scientific discipline holding that paradigm enters the crisis state. "Anomaly appears only against the background provided by the paradigm." [16]

Resolution of the crisis occurs in three ways. The anomalies get explained within the old paradigm or they are simply set aside because there is no known paradigm to answer the question. The third form of resolution is that scientists are forced "to rethink their most cherished beliefs and sometimes, toss them aside. This unsettling event is called a paradigm shift." [17]

PARADIGM SHIFT

Scientists do not take the possibility of a paradigm shift lightly. It is not like a hypothesis that may be discarded when it fails an experimental test. Kuhn saw two conditions that would allow for a paradigm shift. The old paradigm had to be in serious trouble and a new valid paradigm must already exist. "To reject one paradigm without simultaneously substituting another is to reject science itself." [16]

Sometimes those who propose a new paradigm have to pay a heavy price. In 140 A.D. the Greek Astronomer Ptolemy formulated the geocentric view in which the earth was the center of the universe, with the sun, moon, and stars revolving around the earth. Nicolaus Copernicus proved in 1580, however, that the sun rather than the earth was the center of the solar system. Copernicus was condemned as a heretic and his publication was banned. This illustrates how discomfoting it is to have a paradigm challenged.

Although reluctance to change is a human trait, science cannot exist when scientists are so closed minded that they exchange truth for error. Paradigm shifts are unsettling but if truth is ignored science becomes a useless perpetrator of error.

Let's consider the individual who is both a serious student of science and also strong believer in the scientific accuracy of the Bible. Without a doubt they have been taught that the evolutionary naturalism paradigm is the proper way to understand nature. But that world view leaves out primary cause and therefore excludes God.

Some people have been satisfied with a dualistic philosophy and accept two paradigms concerning nature. For many scientists this dualistic approach is not rational and they realize a decision must be made. Although the choice is difficult my feeling is that not many reject science. The evolutionary naturalism paradigm especially as it implies the history of man has long been an effective destroyer of faith in God.

BIBLICAL NATURALISM PARADIGM

We must not allow another generation to pass without solving this dilemma! I believe a biblical naturalism paradigm is the answer. Included in this paradigm must be an understanding of the differences between operational and origins science as well as a clear understanding of primary cause and secondary cause. The rules of causality, uniformity and circumstantial evidence must be accepted as proper criteria to determine the validity of scientific hypotheses when working in the realm of origins science while empiricism and falsifiability must continue to be criteria in the realm of operational science.

For biblical naturalists there are a few central ideas that are so basic and foundational that adherents should not subject them to falsification. The two most basic are: first, God created the universe and living things and second, the Bible is understood to be God's special message to man concerning the origin and maintenance of the Universe. "The Christian sees God as the Creator and upholder of the universe. He actually expects that something about God can be obtained by an investigation of His creation." [3]

Many creationist scientists will desire to include two additional basic premises: first, the earth is thousands not millions of years old and second, the Genesis flood was a global catastrophe. Other parts of the paradigm need to be more tentative as a comprehensive creation model is developed.

The science most people are familiar with deals with regularities rather than one time events known as singularities. Regularly recurring patterns serve as a background against which theories can be falsified. Singularities, on the other hand, are not open to empirical investigation.

"The scientist will have to reconstruct the unobserved past singularity on the basis of knowledge he has from the present." [8] He must depend on the principle of uniformity. "Thus when a geologist sees a deposit in the rocks which resembles one observed to result from flooding, erosion or sedimentation in the present, he can plausibly posit a similar secondary (natural) cause for the unobserved past event." [8]

A good example of this is seen in the work of Steve Austin and Mount Saint Helens. The eruption of Mount Saint Helens was a modern day singular event that would be classified as catastrophic rather than regular. Austin observed real similarities between the sedimentation produced in a very short time at Mount Saint Helens and the sedimentation layers at the Grand Canyon. Using the criteria of uniformity and circumstantial evidence Austin made a case for the creation of the sedimentary rock layers in the Grand Canyon in a short period of time.

Original events, like for example, the origin of the universe or the origin of life are singular events and are not in the realm of empirical science. Even singularities such as macroevolution since they are not testable against any regularly recurring pattern of events must be excluded from empirical science.

Original events as well as certain unobserved secondary events are better investigated by accumulating circumstantial evidence.

Although they are not an empirical science, never the less they function like forensic science. Just as a forensic scientist tries to make a plausible reconstruction of an unobserved (and unrepeatable) murder, so the evolutionist and creationist attempt to construct a plausible scenario of the unobserved past singularity of origin. [8]

It is possible however, to use empirical science to show that there was a beginning. We can observe such evidence as the expanding universe or entropy and deduce that the universe had to have a beginning. Our common sense tells us there had to be an original "cause" for the first living things. That cause was either natural or supernatural.

So there is what we will term "operational science" which deals with normal repeating observable events and there is "origin science" which deals with primary rather than secondary cause. Primary cause is defined as a singular event produced by a force outside the event. A simple example would be an architect designing a house to be built. A secondary cause is simply a "natural" cause that has regularity and can be empirically tested. A simple example would be a furnace that turns on (secondary cause) when the thermostat senses that the temperature has dropped to the programmed setting (primary cause).

Operational science deals with regularly repeating events, whereas origins science must be restricted to singularities. One time events dealing with origins do not necessitate natural cause. We are mistaken in applying uniformity philosophy to origins because origins are not in the domain of "Operational Science." Predictions or trends are foreign to singularities.

There is a crucial difference between uniformitarianism and the principle of uniformity. Uniformitarianism assumes that all past causes will be natural ones like those observed in nature at the present. This is not a scientific assertion, but a philosophical one. That is this kind of uniformitarianism is not justified by observations of a repeated pattern of events in the present. Rather, it is a metaphysical speculation which goes well beyond the domain of operation science. Such uniformitarianism is not science but scientism. it is not scientific study of nature; it is philosophical naturalism. [8]

CAUSALITY

How then can biblical naturalists justify trying to investigate origins? Geisler and Anderson provide an excellent answer. "The basis of speculation about singular events is repeated observation of causal connection, even though the object is a single event. This is how origin science works, whether for evolution or for creation." [8] For example, if it were common for us to find that well designed machines had a knack for designing themselves and putting themselves together our general conclusion would be that design does not demand a designer. On the other hand if we observe that every single well engineered product had an engineer and builder behind it, our general conclusion would be design demands a designer (cause).

How important is the ability by causality argument to conclude that primary cause, the Creator, exists? "Many in the debate have come to realize that the question of the adequacy of young - earth creationism is really tangential to the main issue: can science infer a creator? If the answer to this question is no then it wouldn't really matter what else one said on behalf of any creation model - such a theory simply fails to qualify as a scientific explanation." [17]

The design we detect in present day organisms is produced by "secondary" cause in the form of their genetic code. Do we ever find an instance in nature where DNA (secondary cause) has been produced by random chemical reactions? We never have. So what should our general conclusion be? In operational science secondary cause (DNA) always comes from previously existing in life. But where did the first living things come from? If we could commonly observe life originating (caused) from non-life our proper general understanding would be that the first life came from non-life. However, if we observe that the law of biogenesis is never violated, what should our proper scientific conclusion be? It was a singular event and is outside of the domain of operational science. If we insist on applying the philosophy of uniformitarianism and continuity in our investigation of origins we are not practicing science but metaphysics instead.

On the basis of causal connection it is appropriate to include supernatural in science. If our common sense tells us there had to be a beginning of life and that design demands a designer it is proper for a believer in the biblical naturalism paradigm to include the "Supernatural" Creator in their philosophy of science.

Our uniform experience is; well designed mechanisms require an intelligent maker of the mechanism. "To posit a nonintelligent natural cause based on rare occurrences or minute probabilities is not science, it is luck." [8]

Origins must be excluded from the realm of operational science because, by their nature, they cannot be repeated

or tested. This places origins, whether they are posited to be from natural or supernatural cause, outside the jurisdiction of empirical science.

Operational science deals with the way nature operates by natural cause, while origin science deals with how the universe came into existence and with primary rather than secondary cause. Biblical naturalists hold that primary cause is the supernatural Creator.

"The myth of objective, philosophically neutral science was spawned and spread largely because both theists and naturalists agreed that science, that is, operation science should be restricted to a study of secondary causes, which are continuously acting causes." [8]

Because nature has been observed as a pattern of regular recurrent events operational science has been married to uniformitarianism philosophy. It was a logical deduction that operational science could be used to extrapolate back in history. Secondary cause by purely naturalistic forces is all that has been allowed. If one is strictly studying operational science secondary cause should be posited but when scientists direct their interests toward singular origin type events they should defer to origin science which can and must admit "supernatural" force as primary cause. The great scientists of the 16th and 17th centuries had no problem with recognizing both operational science and origin science. They used the "biblical creationism" paradigm to help them understand nature!

Origin science naturally makes most scientists who have been trained under the reign of the evolutionary naturalism paradigm feel uncomfortable. The realm of origin science is singular non-recurring events that cannot be tested empirically and therefore cannot be falsified. Origin science "must be judged by whether a scenario satisfies the principles of causality and uniformity (analogy) and generally conforms with the accumulated circumstantial evidence in a noncontradictory way." [8] Although evolutionists do not recognize origin science they are reluctant to admit that their theories of origin of life or the universe are not falsifiable either. Because their origin hypothesis cannot be empirically tested the valid realm for evolutionary origins is also origin science rather than operational science.

BIOGENESIS VIOLATED

When we examine evolutionary views of origins by principles of causality and uniformity they come up short. In the realm of the origin of life a great secondary cause principle which has never been known to have been violated must be breached if purely naturalistic forces are posited. The law of biogenesis must be violated again and again. Do we ever see it being violated today, by purely naturalistic entities? The answer is never! On the basis of causality and uniformity this is scientific evidence against the validity of the evolutionary naturalism paradigm.

THERMODYNAMICS VIOLATED

The laws of thermodynamics must be violated if the naturalistic paradigm is used in the realm of origins. Entropy cannot have been in effect if purely natural forces produced the perfect engineering we observe in the solar system, Planet Earth and in living things. Ultimately we always observe entropy in nature. It is understood however, that during their existence living things hold entropy at bay as energy flows through the ecosystem. Living things have the ability to use energy and organize matter into usable configurations, but this only applies in the realm of operational science.

"Any attempt to limit causes of origins to purely natural (secondary) causes is misdirected historically, philosophically, and scientifically." [8]

The rejection of primary cause in origin science must be changed. If as creationists we want to understand God's revelation to man through nature we must, as a real part of our science recognize and support investigation of origins in the context of primary cause.

The great founders of modern science like Kepler, Galileo, Descartes, Harvey, Boyle and Newton all subscribed to a biblical naturalism paradigm. Their creative achievements were due in large part to their ability to bring together natural science with natural theology. "Kepler spoke of Copernican scientists as priests officiating around the altar of the Creator. Newton in turn made no secret of his pleasure that Bentley had found the Principia to be a storehouse of pointers toward the Maker and Creator of all." [8]

A SOLUTION

Much of the confusion on the part of scientists who are believers in God but who have received their training in the form of the naturalistic paradigm could be alleviated by recognizing the distinction between primary and secondary cause. Theistic evolution is unnecessary if one recognizes that origin science is different from operational science. Super-natural cause must be an integral part of origin science.

If one's cosmogony includes the big bang, the natural question arises, where did the matter and energy come from

to make the bang? No purely materialistic paradigm can provide any answer. However the biblical naturalism paradigm, by recognizing the difference between primary and secondary cause, does provide a scientifically logical answer. Furthermore the evolutionary naturalism paradigm has no credible answer for the question; "where did living things come from"? On the other hand the biblical naturalism paradigm has an answer.

What is meant by causality in science? The principle of causality simply stated is: every event in nature has a cause. The fathers of modern science recognized God as the primary cause that originally brought about nature. They also recognized God as the "designer" of secondary causes that control the operation of nature. There could be no science without a recognition of secondary cause and there can be no real origin science without recognition of primary cause.

Discussion of primary cause has been limited, for a long time, to the areas of philosophy and religion and has been forcibly excluded from science. A recognition of the limits of operational science can help us reintroduce primary cause into science. Origin science based on causality, uniformity and circumstantial evidence can help scientists find the answers they are searching for.

UNIFORMITY

The principle of uniformity simply stated is: the present is the key to the past. If we observe an event in nature today we can use today's event to examine the past. For example, if we observe that every single complex man-made structure in existence today involved intelligent design, we can properly deduce that when we observe even more perfect engineering in nature an intelligence was involved. That intelligence may be a secondary cause like, for example, DNA for living organisms. How does a complicated life form come about today? In operational science, we would conclude; its DNA supplied by its parent or parents was the source of that intelligence. But in the realm of origins science; where did the "original" DNA come from? origins science has the answer in the form of an original Intelligence.

Where does the evolutionary naturalism paradigm stand on the question of intelligent design? Evolutionists recognize the same principle of "design demands a designer" but their paradigm completely excludes any influence of any force outside of the material world. The "internal force" which is postulated as the cause for natural phenomena is random chance. Random chance does not ever produce the kind of order we see in nature and by any logic does not require intelligence. Therefore, the evolutionary naturalism paradigm violates the teleological principle of, design demands a designer, that we clearly see in nature.

Since no one was around to observe the origin of the universe or the origin of life we must recognize the validity of employing circumstantial evidence rather than empirical evidence. Although circumstantial evidence cannot be falsified, a logical forensic case can be constructed in much the same way as a criminal investigation can reconstruct a sequence of events in the absence of eyewitnesses.

John Casti provided a list of the criteria for what constitutes valid science. This list was actually produced by Judge William Overton as a part of his ruling in the Arkansas Act 590 case.

- It (science) is guided by natural law.
- It has to be explanatory by reference to natural law.
- It is testable against the empirical world.
- It's conclusions are tentative, ie., are not necessarily the final word.
- It is falsifiable. [4]

Rather than just comparing evolution or creation to these criteria let us compare origins science and operational science to these criteria.

	Supernatural Origin	Natural Origin	Biblical Naturalism Operational	Evolutionary Naturalism Operational
Guided by natural law	No	Yes	Yes	Yes
Explained by natural law	No	Yes	Yes	Yes
Testable against empirical world	No	No	Yes	Yes
Conclusions tentative	No	Yes	Yes	Yes
Falsifiable	No	No	Yes	Yes

It is clear that Judge Overton lacked an understanding of the difference between origin science and operation science. Supernatural origin by its very definition does not rely on nor allow for any influences by natural forces. If Creation happened, the Creator was outside of and apart from the creation. However evolution also fails Overton's criteria as it applies to origins. No theory of evolution can be testable against the empirical world nor can it be falsifiable. Therefore if Judge Overton's criteria is to be followed neither the evolutionary naturalism nor biblical naturalism paradigms should be taught as science.

As anyone with an honest open mind can see the biblical naturalism paradigm meets each of the criteria as they apply to operational science. Biblical naturalism does not rely on supernatural cause.

FAILURE OF EVOLUTION

Evolution may have passed Judge Overton's Criteria on three of the points that apply to natural origin, but that says nothing about whether evolutionary naturalism is a good explanation of what really happened. The evolutionary naturalism paradigm has no feasible theory for primary cause. The most popular theory of the origin of the universe, the big bang theory does not even attempt to explain where the matter and energy to "bang" came from. On the origin of life, the evolutionary naturalism paradigm is equally ineffective. Not one time in history anywhere in the world has the law of biogenesis been observed to have been violated. It should not go unnoticed that a well established "law of science" must be violated in order for the evolutionary naturalism paradigm to be valid! So, natural origin theory may be guided and explained by natural law in someone's imagination but in the real world evolutionary naturalism fails completely on these two criteria.

One thing, however, is for sure; origins as explained by the many theories of evolutionary naturalism are tentative. So the only criteria in Overton's scheme that evolution passes is really a negative for the usefulness of the evolutionary naturalism paradigm.

HISTORY

This author began his research on this paper with the hypothesis that modern day Creationists need to develop and openly acknowledge a biblical naturalism paradigm. The biblical creation paradigm, I believed, was something that a few scientists use today but have not shared it very well with other scientists. I envisioned the biblical creation paradigm to be something new. However as I did my research I soon discovered that the great founders of modern science all subscribed to that very paradigm and it was their belief in a personal rational Creator that drove these men to invent modern science.

There are those who object to "creation science" on grounds that creation entails a "supernatural cause". If the great men of science had limited themselves by ignoring a first cause Creator one wonders how much science would still be unknown today.

For the first two-and-a-half centuries of modern science (1620-1860) most of the leading lights of science believed the universe and life gave evidence of a supernatural creator. One need only to recall names like Bacon, Kepler, Newton, Boyle, Pascal, Mendel, Agassiz, Maxwell and Kelvin - all of whom believed in a supernatural cause of the universe and life. [8]

The often heard cry from evolutionists is that the only people who believe in creation are ignorant and don't know any better. Isn't it interesting that the founders of many institutions of higher learning were creationists. "An examination of a list of the twenty universities which were established in Europe between the years 1550 AD and 1700 AD, will reveal the fact that they were all founded and maintained by some religious denomination." [1]

Kuhn wrote of Europe, "The bulk of scientific knowledge is a product of Europe in the last four centuries. No other place and time has supported that very special community from which scientific productivity comes." [16]

Why were the Greek philosophers not able to do as well as the Renaissance Europeans in inventing a workable system of science?

Jaki gave part of the answer. "The problem of the failure of ancient Greek science is largely the failure of the Greeks of old to go resolutely one step beyond the prime heavens to a prime mover absolutely superior to it." [13]

Although scientists of the 16th and 17th centuries believed in a great Creator, their emphasis was in seeking out regular patterns and ongoing operation of nature. They presupposed a Creator. But in the late 18th and early 19th centuries naturalistic science had begun to enter the domain of origin science. It was during this time that the evolutionary naturalism paradigm was being developed and materialistic nature replaced the first cause creator.

In the latter 19th century the view became nearly universal that science is philosophically neutral and thoroughly objective. Also a new generation of scientists had arisen, one which had not only forgotten that science had a theistic base, but one which had embraced, albeit unconsciously for many, philosophical naturalism. Implicit within naturalism is the denial of a creation distinct from its creator. [25]

The evolutionary naturalism paradigm is the way many people today understand their world. Since man is by nature religious, nature and natural law have become deity. Strong evidence that this religious transition has taken place can be seen in many aspects of the "New Age" movement and with adherents to the "Gaia" philosophy.

It may be that the evolutionary naturalism paradigm did not gain its power by scientific revolution alone. Perhaps the philosophical revolution from theism to naturalism was a force even greater than any new information concerning nature. "The myth has been perpetuated that Darwin did his research as a thoroughly objective scholar. In fact, he had a viewpoint prior to doing any investigation." [25]

George Grinnell, Professor of History of Science at McMaster University wrote, "I have done a great deal of work on Darwin and can say with some assurance that Darwin also did not derive his theory from nature but rather superimposed a certain philosophical world-view on nature and then spent 20 years trying to gather the facts to make it stick." [10]

In 1874 Charles Hodge wrote the first analysis of Darwin's hypothesis and its implications. In his book What Is Darwinism? Hodge wrote that what was really at issue was whether nature was the product of intellectual process guided by God or a natural process "directed" by chance. The exclusion of design in nature is what offended Hodge the most so at the conclusion of his book Hodge wrote, "The conclusion of the whole matter is that the denial of design in nature is virtually the denial of God." [12]

Darwin's theory however continued to become accepted at a very rapid pace. In 1879 a "liberal" religious periodical, the Independent, informed its readers that the best colleges and scientific authorities were "all" teaching evolution, including the evolution of man. [18] The more conservative Observer challenged the Independent's finding by asking college presidents to disclose whether evolution was being taught. Most were reluctant to admit the truth but the Independent on further investigation found that most working naturalists in most universities did accept and teach evolution. At this time, 1880's and 1890's, the majority could best be characterized as Neo-Lamarckians rather than Darwinians. [18] It is important to notice that many theologians were not far behind in their acceptance of evolution.

In the case of Darwin's hypothesis, scientists clearly accepted it as a valid theory without much testing and did not use empirical method or falsification to prove his hypothesis was valid. What they did was to use their authority to convince the public that it was valid. "Evolutionary science became the search for confirming evidence, and the explaining away of negative evidence." [27]

When John Scopes was brought to trial in Dayton, Tennessee he was challenging the biblical creation paradigm. Many intellectuals in America in the year 1925 subscribed to the evolutionary naturalism paradigm while conservative religious people in Tennessee believed the biblical naturalism paradigm was true and had passed a law prohibiting the teaching of evolution in Tennessee's public schools. Two paradigms had come head to head. Evolutionists lost the court battle but won the popularity contest. Creationists were vilified and creation was portrayed as a simple-minded myth.

In public school education, Scopes has been portrayed as a martyr for the cause and has been compared to Copernicus and Galileo.

To the man who pauses to think the matter through, there is no reasonable comparison. ...The

Ptolemaic system, which had been worked out by Ptolemy, had been regarded as the 'Scripture of astronomy' for fourteen hundred years. When Copernicus asserted that the earth rotated on its axis, in contradistinction to Ptolemy, the Roman Catholic clergy, who were the conservatives in science, charged Copernicus with heresy. The clergy were simply holding to the theory which scientists had been teaching for fourteen hundred years. When Galileo added proof to the Copernican theory with his telescope, he was handed over to the inquisition. [1]

Scopes was merely a pawn in the battle between two great paradigms. Galileo and Copernicus were great thinkers who, out of scientific honesty, believed they were compelled to present a new paradigm.

PUBLIC OPINION

It is often reported that it is only a small group of "fringe fundamentalists" who believe God created man.

This is patently not the case. In a national Gallup Survey conducted in 1982, 44 percent of Americans said that they believed God created man pretty much in his present form at one time within the last 10,000 years; 38 percent believed man has developed over millions of years from less advanced forms of life, but God guided this process, including man's creation, and 9 percent believed man has developed over millions of years from less advanced forms of life. God had no part in this process. [2]

It is interesting to hear even from a skeptic the illogical close-mindedness that the scientific establishment has against creation philosophy. Eileen Barker observed:

At one stage in my research, when I had become quite well versed in the creationist literature, I tried putting their arguments to a number of my academic colleagues. I was amazed to find that nearly every occasion we reached a point at which my friends would abandon rational or empirical argument in favor of irritated condemnation or dogmatic assertion. On one occasion a colleague ended up by exclaiming in utter exasperation, "But they're just wrong!" [2]

This shows the power of a paradigm. A paradigm once decided on is expected to go unchallenged. Even dissecting and examining parts of a paradigm are not usually welcomed. Barker's colleagues were intelligent, well-educated people. It is evident that they were also people who preferred not to examine the validity of a different explanation of nature.

One's philosophy of life and world view concerning nature is developed primarily before one enters one's adult vocation. Various experiences influence one's decisions. Family, school (elementary through college), church, reading material, television and peers are among the contributors.

As we have seen, after one decides on a paradigm there is very little interest in investigating its validity. Change is not even considered until so many unexplainable "anomalies" are discovered that they make one's paradigm too ineffective. There are literally millions of people who are caught in the no-man's-land between two paradigms. These are people who believe in the Bible yet also believe in evolutionary naturalism. Their religious training and experiences have suggested evolutionary naturalism does not fit with their theology. On the other hand, their scientific side is not satisfied with creationism because of their formal and informal educational training.

FINAL SUGGESTIONS

What then can be done? We need to understand that origin science, whether based on natural causes or supernatural causes, is not in the realm of empirically based science, we have taken a giant step toward better understanding. Because origin science deals with singular rather than repeating events falsification in the usual sense is impossible. The evidence for or against these two paradigms is best evaluated by forensic science. The three evaluation criteria are: causality, uniformity and circumstantial evidence.

Evolutionary naturalism fails to answer origin science questions in an acceptable way. On the other hand, by using the three criteria, biblical naturalism is a very positive tool to investigate nature. The creation model needs to be further developed and more research needs to be done so that the biblical naturalism paradigm can become even more usable.

We, in good conscience, cannot let another generation go by without developing and promoting the biblical naturalism paradigm. As we have learned, this paradigm is not really new. It was the paradigm of choice for all of the great fathers of science in the 16th and 17th centuries. On the other hand, we need to realize that a shift from the evolutionary naturalism paradigm to the biblical naturalism paradigm will involve turmoil that is best described as, revolution. This revolution needs to start where there is the best chance of success. Churches need to teach biblical naturalism to their members. Parents need to teach it to their children. Christian elementary and

secondary schools need to educate their students with this paradigm. Christian universities are the institutions which can be the most effective in teaching the biblical naturalism paradigm. Many of the students, at the very time in their lives when they are finalizing their paradigm concerning nature, find themselves in the no-man's-land between two paradigms. Too often Christian professors, who may themselves believe the biblical creationism paradigm choose to withhold influencing their students toward the proper paradigm. Many other professors are themselves caught in the no-man's-land. What are the consequences of their silence? Their college textbooks are not silent and assume the evolutionary naturalism paradigm. Students' pre-college educational background pointed them toward evolutionary naturalism. What could have become a nurturing ground for strengthening the faith of Christian students becomes a breeding ground for a faith destroying world view.

So here is a strategy I offer. I suggest that all Christian universities start offering a regular course that investigates the two paradigms in a straight forward manner. This course should be offered on one level as an elective for any non-science student and on a different level as a requirement for all science degree candidates.

Secondary science educators need to develop a curriculum for a similar course to be offered at Christian secondary schools. Finally, curriculum conducive to the educational level of the general public needs to be developed and offered by Churches.

An integral part of any of these courses must be both evidence against the evolutionary naturalism paradigm and scientific support of the biblical naturalism paradigm. As we have discussed, paradigms are not easily let go of once they are personally adopted. There are however few gifts more important to pass on to our young people than the enlightenment the biblical naturalism paradigm can produce.

REFERENCES

- [1] Frank E. Allen, **Evolution In the Balances**, 1926 Revell Company, New York, 11-12, 186.
- [2] Eileen Barker, **Let There Be Light**, Darwinism and Divinity Ed. by John Durant, 1985, Basil Blackwell Inc. N.Y., 186, 193.
- [3] Richard Bube, **The Encounter Between Christianity and Science**, 1968, Eerdman's Pub. Comp. Grand Rapids, Mich. 68.
- [4] John Casti, **Paradigms Lost, Images of Man In The Mirror of Science**, 1989, William Morrow and Comp., Inc. N.Y. 39, 124-125.
- [5] Dan Chiras, **Environmental Science**, 1990, Benjamin/Cummings' Pub. Comp. Menlo Park, Cal., 17.
- [6] William Davis, Eldra Soleman, Linda Berg, **The World of Biology**, 1990, Saunders Coolege Publishing, Philadelphia, 29.
- [7] Pierre Teilhard de Chardin, As noted by Johnson [14], 118.
- [8] Norman Geisler and Kirby Anderson, **Origin Science**, 1987, Baker Book House, Grand Rapids, Mich. 14, 25, 30, 31, 106, 108, 109, 125-126, 128, 161.
- [9] Goethe, citation unknown.
- [10] George Grinnell, **Reexamination of the Foundations**, an interview in Pensee, May, 1972, 44 As noted in Thaxton [25] p.5.
- [11] Gary Gutting, **Paradigms and Revolutions**, 1980, University of Notre Dame Press, Notre Dame, 1.
- [12] Charles Hodge, **What Is Darwinism?**, 1984, Scribner Armstron and comp., N.Y., 173.
- [13] Stanley Jaki, **The Road of Science and the Ways of God**, 1978, Univ. of Chicago Press, Chicago, 320.
- [14] Phillip Johnson, **Darwin On Trial**, 1991, InterVarsity Press, Downers Grove, Ill., 118, 150.
- [15] M.D. King, **Reason, Tradition, and the Progressiveness of Science**, Paradigms and Revolutions, Ed. by Gary Gutting, 1980, University of Notre Dame Press, Notre Dame, 111.
- [16] Thomas Kuhn, **The Structure of Scientific Revolutions**, 1979, University of Chicago Press, Chicago, 65,79, 168.
- [17] Paul Nelson, **The Whole Question of Metaphysics**, 1993, Origins Research, Vol. 15, No. 1, 6.
- [18] Ronald Numbers, **Creation By Natural Law**, 1977, Univ. of Washington Press, Seattle., 106.
- [19] A.I. Oparin, **The Origin of Life**, 1953, Dover Pub., New York, 1.
- [20] Paul Moody, **Introduction to Evolution**, 1962, Harper and Row, New York, .ix.
- [21] Henry Morris, **The Long War Against God**, 1989, Baker Book House, Grand Rapids, Mich., 23.
- [22] A.R. Peacocke, **Rethinking Religious Faith In A World of Science**, Religion, Science and Public Policy, Edited by Frank Birtel, 1987, Crossroads Publishing Corp., N.Y., 3-4.
- [23] Holmes Rolston III, **Science and Religion**, 1987, Temple Univ. Press, Philadelphia, 11.
- [24] Carl Sagan, **Cosmos**, 1980, Random House, New York, 4.
- [25] Charles Thaxton, **The Intellectuals Speak Out About God**, Ed. by Roy Varghese, 1984, Lewis and Stanley Publishers, Dallas, 4.
- [26] Bert Thompson, **Theistic Evolution**, 1977, Lambert Book House, Shreveport, 17.
- [27] Author and source unknown.

