

# ARTICLES

## IMPLICATIONS OF VARIOUS INTERPRETATIONS OF THE FOSSIL RECORD

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### WHAT THIS ARTICLE IS ABOUT

*Between the two extremes of a literal six-day creation week and evolutionary theory are a significant number of models for origins. Each has its own unique set of assumptions and problems that it attempts to syncretize. Roth examines ten models for origins and discusses the problems that led to their formulation. Included are the supports that have been mustered for each model, along with a comment as to its difficulties in the light of both science and the Bible. The philosophical implications of these ideas are also examined.*

### I. INTRODUCTION

Man has long pondered the question of his origin, purpose and destiny. Such queries are of more than mere academic interest, because their answers affect many of the major decisions he makes. The interpretations one places on the fossil record can be pertinent to these questions, since they influence: 1) one's concept of the origin of life and more specifically the origin of man, 2) one's belief in God and the kind of God He is, and 3) ideas regarding the truthfulness and authority of the Hebrew-Christian Scriptures including their accounts of origins.

As a basis for discussion of these issues, this essay will assume that truth is to be found in nature and in the Bible. These are not blind assumptions. Science, which is an explanation of nature, has had a gratifying measure of success; combined with technology, it has produced some very impressive achievements in the past decades. The Bible has demonstrated a gratifying degree of historical reliability and has endured for millennia as a respected guide for life.

Interpretations of the Bible and of scientific data are not always in agreement. Probably the most important conflict involves the history of past life on earth as it is represented by the fossils found buried in many of the sediments of the earth. Many different interpretations have been given to these fossils. We shall consider several of the more important ideas and their implications.

Fossils, which are evidence of past life, are found almost exclusively in the sedimentary rocks of the earth's crust. These rocks form layers of

strata that sometimes reach several kilometers in thickness. The sequence of these strata forms the geologic column. The fact that the lower layers were usually deposited before the upper ones, and are hence older, is self-evident. How much older is an important part of the question we want to consider. Some interpretations postulate a very rapid rate of buildup, while others propose a very slow rate.

The main portion of the geologic column — the Phanerozoic — contains sediments with relatively abundant, unquestioned fossils. This main portion forms about  $\frac{2}{3}$  of the total volume of sediments. In the lower  $\frac{1}{3}$  (the Precambrian) the fossils in the sediments are very rare and/or questionable. The kinds of fossils found in the sedimentary layers are sometimes unique to their position in the geologic column. For instance, sponge-like Archeociathids are found only in the lower part of the Phanerozoic; grasses and man are found only in the upper part. Fossils such as the lamp shell *Lingula* are found throughout. The simple vascular plants called Psilophytes are found only at the bottom and as living representatives. The abundance of fossils in the sediments varies greatly. Usually none or only a few are found; in rare cases they are extremely abundant.

There are many different kinds of fossils — estimates of the number of different species vary greatly but often run into the millions. Due to problems in variation and identification, the number of fossil species should not be equated with the number of living species. There are probably many more fossil species than true “biological” species.

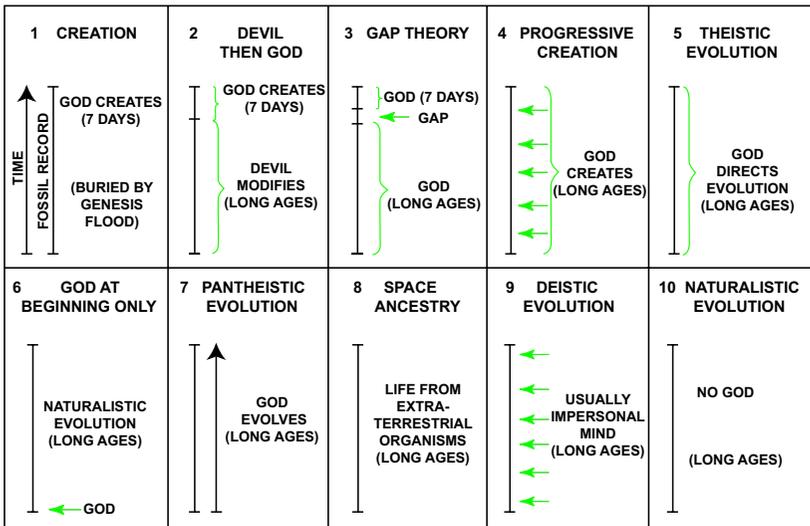
At the opposite ends of the spectrum of interpretations of the fossil record are *creation* and *naturalistic evolution*. The former is the idea that the fossils represent remains of life created by God during creation week and buried during the Genesis flood; the latter views them to be the product of purely naturalistic processes resulting from gradual evolution over millions of years. A significant number of important *intermediate views* between these two contrasting interpretations have been proposed and will be considered.

At present, the intermediate views are the most popular ideas of origins among Christian churches. They are appealing because they permit one to accept a significant proportion of evolutionary theory while still preserving the concept of God as being involved in creation. These intermediate views can be adopted only by yielding a significant degree of scriptural integrity to the concepts of evolutionary interpretation while having to go beyond these latter views to include God. These require one to abandon the purely naturalistic explanations as usually presented in science texts.

Since all these intermediate views reduce the significance of the six-day creation week and the Sabbath, they are of particular concern to such groups as the Seventh Day Baptist Church and the Seventh-day Adventist Church, which place great emphasis on the Sabbath as a memorial of creation week.

The term truth as used in this discussion refers to “ultimate truth,” not what one may think truth is, not relative truth, but that which is ultimate, absolute truth.

**FIGURE 1. Ten interpretations of the geologic column.**



**II. COMMENTS ON VARIOUS INTERPRETATIONS**

Figure 1 is a chart representing ten different interpretations of the fossil record, beginning with creation and ending with naturalistic evolution. These are arranged in a sequence that represents an increasing trend towards naturalism and away from creation as described in Genesis. While these trends apply in general, the arrangement of some is debatable. At the left of each interpretation is a vertical line representing the geologic column with comments on the way in which the column fits into various interpretations. The bottom of the line represents the lowest or oldest layers, the top the highest or youngest. Comments on each model follow. Numerous other ideas and intermediates between these ten interpretations could be proposed. We are not dealing with simple black-and-white issues,

but with shades of gray — sometimes very close shades such as dark medium gray compared to darker medium gray! Unfortunately, these various concepts are vague and sometimes ill-defined. There is no standard terminology associated with many, but an attempt has been made to use commonly employed terminology. References related to some of the concepts or use of terms have been included.

Some of the major problems with each model are given so as to facilitate evaluation.

## **1. CREATION, also called special creation or fiat creation**

### **a. Description of Model**

This is the most direct reading of Scripture. Creation was in six literal days with a short period of time (compared to the geologic time scale) between creation and the flood, and a short period thereafter. There was no previous life on earth (Genesis 1:2), or no earth, and the flood was the major catastrophe that has produced most of the fossiliferous sedimentary layers on the surface of the earth. Present estimates of sedimentation rates of a few centimeters to a meter per thousand years would not allow for much sedimentation before or after the flood, although it is expected that at the end of the flood and in subsequent years, sedimentation would have been much more rapid than it is at present. At that time the crust of the earth was more in disequilibrium. The model fits well with the significant degree of design and orderliness that is found in nature. A modification of this model which postulates that God created the fossils as such *in situ* has sometimes been entertained. This idea has no general acceptance at present. One reason for its rejection is that there is conflict between the good and truthful God described in the Bible and the trickery implied in making fake fossils.

### **b. Problems**

The model disagrees with several scientific *interpretations* that specify long ages, especially radiometric dating, rate of cooling of magmatic bodies, rate of formation of fossil reefs, and rate of growth of successive fossil forests.

## **2. DEVIL, THEN GOD**

**a. Description of Model**

Being jealous of God and His creative power, the Devil took germs of life from elsewhere and long before creation week tried on this earth to imitate God's creation. Most of the geologic column was developed over long ages before creation week, and the organisms in it are the result of satanic experimentation. Following this, creation week took place as described in Genesis, but it was a local creation; hence, the nature that we see about us represents a mixture of God's creation and the Devil's work. This model explains the apparent occurrence of evil, in the form of cruel, predatory organisms, in the lower (early) parts of the fossil record before man who appears in the upper (later) part. See Models 4 and 5 for further discussion of this question.

**b. Problems**

This particular model excludes the concept of God as the all-inclusive Creator (Genesis 1 and 2; Exodus 20:11; Nehemiah 9:6; and John 1:3). God did not create all. It is also contrary to Moses' description of an original world that was dark (light is necessary for most life) and void before creation (Genesis 1:2). There is no *direct* scientific, scriptural, or other support for the idea itself. Related evidence can be gathered, but it usually fits many models, and evidence for the idea itself is lacking. Any discovery about past life can be attributed to the capriciousness of the Devil. Such a concept is unsatisfying because it is not easily testable. For example, it is difficult to test the idea that we were created fifteen minutes ago with a fully mature environment complete with past memories, etc. We tend to reject such models because we suspect that reality is not that capricious. The testable parts are not.

**3. THE GAP THEORY (Fields 1976), also called Ruin and Restoration**

**a. Description of Model**

Life was created by God on this earth in the distant past; however, He destroyed that life following a judgment upon Satan. The Scofield Reference Bible refers to this in connection with Genesis 1:2 (1917 ed.) which says that the earth was a waste place, and with Isaiah 45:18 (1967 ed.) which says that God did not create the earth as a waste place. The argument is that

the earth must have become a waste place (ruined) subsequent to an ancient creation not described in Genesis.

**b. Problems**

As with the previous model, the idea is difficult to evaluate and to test, since almost any data can be fitted into the concept. It has little scientific or scriptural support. There is no evidence of a worldwide gap in the fossil record. One would expect that if there had been a gap (ruin), a distinct blank period (gap) in the fossil record should be evident on a worldwide basis prior to a subsequent creation. One would also expect differences in the fossil record across the gap.

**4. PROGRESSIVE CREATION** (Gedney 1950, p 45-50; Ramm 1956, p 112, 215; Fields 1978, p 165-179). The “Day-Age theory,” in which each day of creation represents long ages, can also be fitted into this model.

**a. Description of Model**

God performed multiple creation events over long periods of time. The degree of progression from bottom to top in the fossil record reflects degrees of progress in creative acts. It fits in both with the evidence of gaps in the fossil record which support creation and with ideas of long ages for the geologic column.

**b. Problems**

Neither science nor Scripture suggests directly that events occurred this way; hence, the *basic idea itself* is unsatisfying because it lacks support. It is difficult to test. It is contrary to the idea of a six-day, all-inclusive creation; however, God is still the Creator of all things. The presence of predation (e.g., *Tyrannosaurus rex*) earlier in the fossil record makes evil appear, in the form of predation, before the advent of man. This tends to negate the Genesis story of a good Creator and creation followed by the fall of man and the consequent evil that ensued. The model implies many errors or lack of successes on God’s part over long periods of time before the advent of evil. Thousands of important taxa present at various levels in the fossil record are not now living on the surface of the earth. Dobzhansky (1973), while criticizing creation, emphasizes the problem of species extinction: “...but what a senseless operation

it would have been, on God's part, to fabricate a multitude of species *ex nihilo* and then let most of them die out!" Progressive creation does not provide a good explanation. One can postulate a God who would create by this method, but it does not fit the God described in the Bible. Genesis explains these on the basis of a major destruction of the earth at the time of the Noachian flood because of man's sin.

**5. THEISTIC EVOLUTION** (Ramm 1956, p 113; Key 1960, p 21-22). This is what Marsh (1950, p 53-54) calls teleological evolution. Modifications of this view placing special emphasis on the creation and nature of man have been proposed by Teilhard de Chardin (1956, p 63) and Bube (1971). This latter author calls his idea biblical evolutionism.

**a. Description of Model**

God directed the continuous progress of evolution from simple to complex. The idea fits fairly easily with many concepts of the general theory of evolution and still permits one to have God. Also, God is available to bridge some of the difficult barriers that evolution faces, such as the problem of the origin of life, the gaps in the fossil record, development of the higher mental characteristics of man, etc.

**b. Problems**

The gaps in the fossil record do not suggest a continuous process of evolution. The model appears demeaning to God in contrast to the all-powerful Creator described in the Bible. Here, He uses the crutch of evolution to produce advanced forms. The problem of numerous created errors implied by extinct taxa (see Model 4 above) and the slow progress and competition implied in an evolutionary model challenge God's creative power, knowledge, and goodness. Competition seems out of character with the God described in the Bible who does not forget the sparrow (Luke 12:6) and whose ideal for life includes the wolf and the lamb living peacefully together (Isaiah 11:6; 65:25). As is the case for progressive creation, we also have the appearance of evil in nature before the fall of man — a logical difficulty.

**6. GOD AT BEGINNING ONLY** (Klotz 1955, p 477)

**a. Description of Model**

This model has sometimes been called theistic evolution. Here, God starts life, then naturalistic evolution takes over without God's help. This particular model solves the problem of the origin of life on earth, which is perhaps the most difficult problem that evolution faces (Bonner 1962). Following this, naturalistic processes produce advanced forms of life.

**b. Problems**

The problems outlined above for theistic evolution apply here also, to which one can add the problems of naturalistic evolution without the help of God. For instance, how would inept, intermediate stages survive competition in a system of survival of the fittest while changing from one functional type to another? The forelimb of an organism evolving into a wing (to make a bird) in its inept, intermediate stage would not provide the necessary survival required by evolution. When the intermediate stage is neither a good organ for running nor for flying, survival would not be expected, because competition would eliminate it.

**7. PANTHEISTIC EVOLUTION (Key 1960, p 22)**

**a. Description of Model**

God progresses with evolution. It is a more naturalistic evolutionary philosophy than the previous case, in that God is evolving. Nevertheless, He is still God.

**b. Problems**

The problems are the same as those given for the previous model. In addition, it is very demeaning to the concept of God's greatness, as described in the Bible. There is no direct data in either Scripture or science to indicate that this is God's past history.

**8. SPACE ANCESTRY (Arrhenius 1908; von Däniken 1971; Crick & Orgel 1973)**

**a. Description of Model**

Under this heading can be included a variety of ideas that have gained some popularity in recent years. Basically they conceive of extraterrestrial life forms originating or modifying terrestrial

life. Some ideas postulate that only simple life was passively transferred to earth, while others postulate direct transfer or even hybridization between super beings and earth forms to produce more advanced forms of life. Such models solve some of the problems of naturalistic evolution by invoking the use of organisms from outer space. One is not bound to terrestrial limitations for the origin of life.

**b. Problems**

Probably the most serious problem of these models is the same as for many of the others presented above — namely, a lack of support for the ideas themselves. While they can solve many problems, the high degree of conjecture invoked makes them unattractive. Also, there is some doubt regarding the facilitation of organismal interplanetary space travel by naturalistic means.

**9. DEISTIC EVOLUTION** (Key 1960, p 20-21)

**a. Description of Model**

Here, an impersonal mind directs evolution. There is some kind of force, some special factor above our present concept of naturalism that has functioned in developing the advanced forms of life on earth. God is usually not involved.

**b. Problems**

Again, the problems with this model are the same as above; also, because it usually eliminates the necessity of a personal God, it is more difficult to conceive of the origin of those higher characteristics of man such as love, morality, concern, and freedom of choice which are difficult to explain on a naturalistic basis.

**10. NATURALISTIC EVOLUTION** (Ramm 1956, p 113), also called evolution, atheistic evolution (Key 1960, p 20), or mechanistic evolution (Marsh 1950, p 53)

**a. Description of Model**

Advanced forms of life have developed strictly as a result of the operation of natural law. This idea suits those who limit the concept of reality to tangible, natural laws. No intelligent design or supernaturalism is involved.

**b. Problems**

This model does not answer important questions such as the following: How do very complex life systems originate on earth without a designer? How do inept, intermediate forms survive the competition of naturalistic evolution? How can one bridge the gaps in the fossil record? How do you originate man's higher characteristics such as consciousness, free will, morality, and love in a purely mechanistic system?

### **III. GENERAL COMMENTS**

#### **A. Relation of Interpretations to Bible**

None of the interpretations considered above, except the creation model, have good biblical support. They suggest progress while the Bible speaks of degeneration (compare Romans 8:22 to Genesis 1:31). That many involve the concept of a God is often their only serious link to Scripture. The Bible describes a short creation period (Genesis 1 and 2) of six literal days a few thousand years ago, producing all the basic forms of life. It does not at all suggest long ages for this process. Also, the original earth is described as being empty and dark (Genesis 1:2). Since light is necessary for many of the forms of life found throughout the fossil record, the concept of an extended period for the development of advanced forms before creation week is not entertained.

Those who adopt one of the intermediate views between creation and naturalistic evolution often assume the first part of Genesis to be an allegory. A weakness in this argumentation is that one must also assume the other Scriptural references to this early part to be allegorical. These later references do not suggest this. It is not only Moses, the author of Genesis, who is being questioned by these views, but others including God who dictated the fourth commandment (Exodus 20:11). Christ also refers to the Genesis account of origins (Matthew 19:4) and so does the apostle Paul (1 Corinthians 14:45). The apostle Peter's description (2 Peter 3:3-6) corresponds to Genesis. Hence these ideas tend to raise questions regarding the reliability of Scripture as a whole.

With most of these interpretations the question of God's integrity is serious. Would God state in the fourth commandment (Exodus 20:11) that He created all in six days if this were not the case? If so, He is not the God described in the Bible — the God who speaks the truth, declares what is right (Isaiah 45:19), and never tells falsehoods (Titus 1:2). Acceptance of a non-creation interpretation does more than harm Genesis; it poses a serious threat to God's integrity. This is important.

#### **B. Relation of a Six-day Creation to Time in the Fossil Record**

It is seldom appreciated that if one conceives of a significant amount of time for any part of the fossil record, one precludes the concept of an all-inclusive, six-day creation as given in Genesis 1 and 2 and Exodus 20:11. If there are millions of years in the fossil record, it does not seem that all of creation was in six days, since many parts of the geologic column contain unique fossil kinds. This uniqueness combined with the non-uniqueness expected of the process of fossilization seems to exclude the concept of an all-inclusive, six-day creation, if much time is put into the fossil record. Under the concept of an all-inclusive (for the major kinds of organisms but allowing for minor variation), six-day creation, a great variety of plants and animals would be present from the beginning. It does not seem that many isolated, random events of preservation over long periods of time would produce only one type of fossil in a lower level, and another at a different level, if all kinds of organisms are present. The process of fossilization usually requires quite rapid burial in order that preservation take place before degradation. The factors favoring rapid burial (flash floods, volcanic activity, windstorms) are not very selective and act on most of the organisms present.

As an example, if one puts an appreciable amount of time between creation and the worldwide flood described in Genesis, and further states that the lower part of the fossil record represents that long time, one would expect the fossilized organisms to be somewhat representative of the various forms of life present before the Genesis flood, and not just an unrepresentative, unique sample. Yet when one looks at the fossil record, one finds almost exclusively marine organisms in the lower part, while most of the higher forms of life that should have been present are not represented. Conversely, if one postulates a great length of time since the Genesis flood, making most of the upper part of the fossil record a post-flood event, one wonders why the flood event in the lower part of the record does not represent the many types of created life that would be expected. One would not expect the flood to be so selective as to exclude higher forms of life. Hence, if any significant amount of time is put into the fossil record, its uniqueness and the lack of uniqueness of the preservation process precludes an all-inclusive, six-day creation as described in Genesis 1 and Exodus 20:11.

The degree of uniqueness of fossils found in the geologic column is explained by creationists on the basis of processes active during the Genesis flood. These include: 1) sorting by water currents, 2) motility of some

organisms, 3) original ecology buried by gradually rising waters, and 4) sorting by density.

It is also of interest that the present process of accumulation of sediments on the surface of the earth is very slow, averaging at best less than one meter per thousand years (most estimates are much lower but are indirect and based on an assumed age of the earth). Biblical history does not allow much time either before or after the flood for the accumulation of very much sediment under normal conditions. This is a further reason for placing most of the fossil record in the flood when in a biblical context.

### **C. Relation of Scientific Data to the Various Interpretations**

Because so many different views are being considered, a simple general statement is not easily formulated. This depends partially on one's definition of science. Science is usually considered to be explanations about nature. Traditionally, science has not always excluded God or the supernatural. Many of the founders of modern science were seeking for explanations about God's creation and principles He had incorporated therein. During the past century, science has tended more towards naturalism, excluding God and the supernatural. Contemporary research papers and textbooks of science seldom refer to God or other unnaturalistic explanations. Many scientists believe there is tension between an omnipotent God, who can overrule the laws of nature, and science which seeks for consistent explanations within established laws. Therefore, one would expect a scientist to seek naturalistic explanations that exclude God. But if supernatural explanations are a part of reality, such an exclusion would be a tendency towards error. This writer is of the opinion that the tension between God and science is not as serious as envisioned above — that both God and science can co-exist, especially when we are dealing with the non-capricious type of God described in the Bible and when considering science as a search for explanations based on the consistency that God has placed in nature. God and science need not be mutually exclusive concepts.

Should one define science as strictly naturalistic, one would have to exclude all but Model 10 (naturalistic evolution) from science, and many scientists would also be excluded from this strict definition. Many of them believe there to be some kind of God or mind that is responsible for the degree of organization evident in nature. Hence, many of the models proposed above would not be excluded from science if one uses a broad definition of science. Lack of definition of terms precludes a definitive

statement. Suffice it to state that science and naturalism are not always identical.

With reference to the ten specific models described above, some data do not support one idea, while they may be acceptable to another. For instance, the ubiquitous gaps in the fossil record would not support the idea that God had used a continuous process of small evolutionary changes to create the advanced forms of life (theistic evolution). One would expect to find a near-continuous series of advancing forms as evolution is followed through the geologic column. The explanations suggested by evolutionists for this problem, including punctuated equilibrium, are inadequate. The gaps are more in agreement with the idea that there may have been a number of progressive creations. Likewise, creation and various other views can be supported by the scientific data that reveal that the spontaneous origin of the complex integrated biochemical systems of even the simplest organisms is, at best, a most improbable event.

Because the intermediate views (Models 2-9) are so broad, it is difficult to find scientific data that disagree with all of them, thus supporting other ideas. Also, the closer two theories are, the less data that will be available to test the difference. This is as expected. For instance, the difference between multiple progressive creations and a single creation of all basic types is not as easily testable scientifically as is the difference between a theistically guided, continuous process of evolution (theistic evolution) and a single creation.

The difference between creation and all other views given above could be tested by the amount of time one finds for the deposition of the fossil record in the crust of the earth. All the other views propose a long time for the development of the fossil record, while creation does not. Some interpretations of scientific data (e.g., paucity of time-dependent erosional features expected in the fossil record at so-called long time gaps — paraconformities) suggest a brief period for life on earth. One must also remember that with this question, we are dealing with past events that are not at present easily repeatable, hence more difficult to test scientifically. The degree of objectivity is necessarily reduced, as one deals with the past.

In summarizing this section, we can state that scientific interpretations that imply long ages for the formation of the fossil record would fit all but the creation model. The problems of the spontaneous origin of life and of complex integrated life systems are good scientific evidence against the theory of naturalistic evolution and those interpretations closely related to

it. This is not so much the case (depending on one's definition of science) for those interpretations closely related to creation, where God transcends scientific difficulties. Here, science is uncomfortable with such supernaturalistic explanations, because it does not have the facility to test such. This does not mean they are false; it points out one of the limitations of science.

#### **D. Relation of Models to Drifting Patterns of Thought**

The influence of the intermediate views given above on the beliefs of many Christian churches has been considerable. Since the popularization of the theory of evolution during the past century, many denominations have in some way accommodated to various ideas of the progressive development of life over long ages. It is disappointing to see churches which usually place a very high priority on "established" truth change their beliefs; yet this occurs, often slowly and insidiously.

Richard Niebuhr in his book *The Social Sources of Denominationalism* (1957, p 19-20) has outlined the traditional history of a religious group. After being organized by the original reformers, the character of the sect is soon changed as a new generation of children is born. This new generation rarely has the fervor of its fathers who fashioned their "convictions in the heat of the conflict." Succeeding generations find isolation from the world more difficult. Wealth and culture accrue as compromise of the original purposes brings in the usual churchy type of morals. Soon the new group becomes a traditional church.

This traditional church is more a social structure than the instrument for reform originally intended. Managerial requirements distract increasingly the church's efforts from religious matters.

That drifting away from the Bible and God is a traditional sociological pattern is also illustrated in Old Testament history, where repeatedly God had to use drastic means to reverse the trend. Such incidents as the Genesis flood, the long sojourn of the Israelites in the desert, and the Babylonian Captivity illustrate how difficult but important it is to resist such trends and move towards God and the Bible.

Modern educational institutions also illustrate this tendency to drift. A large number of institutions of higher learning in the United States (e.g., Harvard, Princeton, the University of Southern California, Auburn University, Boston University, Wichita State University, Wesleyan University) began as religious, church-related institutions but have since moved well down the path to secularization and are no longer church related. It is significant that (at least to the best of the writer's knowledge) no institution

has begun as secular and then became religious. Here the trend also seems to be away from God.

The patterns of drifting in churches, in Old Testament history, and in educational institutions all appear to be trends *away* from God. This is unfortunate. Gradual and sometimes barely perceptible drifting is disturbing to anyone concerned with truth which does not change. One can unconsciously drift from one position to a slightly different one, and so on. The ten models of interpretation of the fossil record given above, and a number of intermediates we could place between them, illustrate how one could slowly and almost imperceptibly drift away from a belief in a Creator to atheism. The path can be a facile way to destroy the Bible and God — painlessly.

### **E. Trends and Truth**

Changes in ideas may not be bad. They certainly are not when the trend is towards truth. But when one moves into less-supported paradigms, caution is warranted. Certainly shifting popular opinion is not a sound criterion for truth, whether it be about the fossil record or any other aspect of reality. More thorough and sound bases must be sought. We need to take cognizance of sociological patterns and not base truth solely on consensus trends. We need to be more concerned about the validity and authentication of certain ideas and what consequences for truth certain patterns entail.

One may argue that the trend away from a direct interpretation of the Bible towards intermediate views or naturalistic evolution may be a trend towards truth. In this writer's opinion this argument has some difficulties. Reasons are the following. 1) One has to deny the high degree of historical validity of the Bible. While the creation account has not been authenticated, it does not appear that the Bible writers invented the historical accounts they gave. The validation of many of those accounts lends support to those ideas that have not been validated. This would include the creation and flood accounts. The fact that many of the Bible writers, including Moses who wrote Genesis, were willing to make great sacrifices for what they believed to be true testifies to their integrity. 2) The intermediate views given above generally lack authoritative support. One does not find in either sacred history or in science the ideas proposed. Neither the Bible nor nature seems to say that God or the Devil acted in one of these particular ways. 3) Naturalistic evolution faces nearly insurmountable problems as defined within its own naturalistic system. See the discussion of Model 10 for details.

In this writer's opinion, creation by a God who established the laws of science and who revealed history in Scripture is the most satisfying model of origins and is best supported by the reality around us.

#### IV. CONCLUSIONS

The various interpretations of the fossil record given above show how one can gradually change his ideas from a belief in creation as described in the Bible to naturalistic evolution. There are sociological factors that favor a trend in this direction. This writer hopes that efforts will be made to go in the *opposite direction* — closer to God. Man's most important relationship is with his God, and we should do all we can to improve it.

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