THE

DIVINE

OR

TEMPORAL?

Consentire causa consentiendi est sacrificare sapientiam.

THE CREATION

DIVINE

OR

TEMPORAL?

by

John W. Lee

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The wisdom to use knowledge is a talent most essential to a Christian. This may, in fact, be the vital link between a man and his God. Because of this it is most alarming to observe the eagerness with which many God-fearing people encourage and even develop seemingly knowledgeable ideas — without full evaluation of truth. Man cannot employ too great a sobriety when fulfilling this task. In honesty to himself he must search for validity—not in the variance of theories, but in the authenticity of facts; not in the popularity of the majority, but in a comparison with the minority; not in the impact of emotion, but in the subtilty of reasoning.

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INTRODUCTION

The creation of the universe and mankind has always held a unique position in the human intellect. Man's concept of the creation has been directly associated with his social and technological level of existence. When man's ideals were governed by the mystical magic of primitive philosophies, he also used these ideals to handle the question of the creation. He reduced the creation to a series of magical acts governed by various gods. Now that man has entered into a highly developed technological era, he has similarly fallen into a reliance on science for an explanation of his existence. In an attempt to fulfill this need, science has offered several alternatives presently considered under the term "evolution". Mankind's curiosity and his attempts to explain the unknown have always attracted and maintained the interest of a wide audience. Unfortunately, this widespread initial acceptance has not always been affirmed and reaffirmed by a proportionate amount of clarity and wisdom. Instead the creation has been thrown into a maze of confusion and misunderstanding.

Because of the diversity in opinion about mankind's origin and the confusion regarding the theory of evolution, this article has been written. Seldom has the religious world faced such a controversy. Men of faith must either oppose the evolutionary concept or try to incorporate it into their religion. This text will deal with some of the conflicting philosophies on creation, comparing them with each other and with the scientific data now available. An evaluation will be made of the scientific data used to support the theory of evolution. So at this point, the importance of examining the available data objectively, whether it be Biblical or scientific, cannot be overemphasized.

One of the primary difficulties surrounding the study of evolution is that it requires an understanding of not only the religious philosophies about the creation, but also some of the basic concepts of science. Unfortunately, interested people often find themselves with an adequate knowledge of one but not the other. This brief survey will combine both the scriptural and

scientific information concerning the creation and hopefully give a more unified outlook. Because this effort is limited, the reader is urged to use it not as an end, but rather a continuance for his studies. The primary purpose is not to completely change the beliefs on the subject of evolution; experience has taught, expecially in this area, that it is difficult, if not impossible, to change or displace people's pre-set notion. However, the aim is to set forth for consideration some tacts concerning the creation which may not have previously been considered. Adequately explaining the beginning of man is a monumental task. Men of the past have failed, our contemporaries have not been able to master the task, and mortal man cannot be expected to fully comprehend such intricate knowledge. However, careful examination of the material presented here should give the assurance that a belief in the Genesis account may be maintained without fear of contradicting the basic concepts of science.

The theory of evolution is unique from other concepts developed by science in that it cannot be summed up in precise technical terms. The normal course of scientific investigation is to recognize the problem, gather all available data, formulate a working hypothesis or theory, and finally test the hypothesis under actual conditions—thus determining its validity. The difficulty with creation and evolution is that they cannot be subjected to this complete process. The first three steps of research can be met; however, the final phase which checks its validity cannot be fully satisfied. Evolution cannot be subjected to the same rigorous testing imposed on other scientific ideas because the recreation of exact existing conditions of the past is impossible. Due to this shortcoming in the examination of evolution, it has developed into a philosophical concept which attempts to interpret scientific data. rather than a known law of science.

Since it is not solely dependent upon facts, but is affected by man's interpretation of those facts, no field of intellectual endeavor is subject to more debate and discussion than the realm of philosophy. It is evident that much of the confusion which troubles people in dealing with evolution stems from drawing conclusions before thoroughly examining what is really known. Many, unfortunately, immediately label information not agreeing with their pre-set notions as "false" when, more often than not, it is man's own interpretation of the data which is really at fault. The greatest error in most people's evaluation does not reside in the

available data, but in the connotations they attach to it. These connotations can be affected by either of two weaknesses: 1) an ignorance of how to truly and objectively evaluate scientific data; or 2) a pre-set belief or conclusion drawn before the data is examined. Either of these faults will lead to inaccurate conclusions because the investigator will tend to examine the facts with the idea of supporting his theory, rather than drawing objective and valid conclusions. Consequently, most of the confusion must be attributed to the weakness of man, not to the inaccuracy of the data. If one can examine the situation as it is, and not necessarily as he has been told by others, a tremendous amount of the confusion will fade away.

Another unfortunate characteristic of the study of evolution and the creation is its extremely emotional nature. Unquestionably, no topic has developed as severe or prolonged furor over the entire religious world during the last century. Unlike most religious debates which question how the Bible is to be interpreted, the theory of evolution even challenges directly the validity of the scriptures. Consequently, people often become emotional—even to the point of irrationality—and fail to see clearly the facts surrounding the issue. Countless irrational statements have been made by those who support evolution and those who reject it until the issue has been clouded with absurd and unfounded claims. A great deal of confusion and error has also resulted from people letting, or even wanting, others to do their thinking for them. So consider the arguments presented here, but justify them in your own mind.

The ever present critic will say that this topic invades the "secret things" of Deut. 29:29.

"The secret things belong unto the Lord our God: but those things which are revealed belong unto us and to our children for ever, that we may do all the words of this law."

Although it is agreed that some aspects of the creation must be left only to the understanding of a higher deity, it is difficult to conceive of a topic being given so much Biblical attention and still rendered off limits to man's study by God. Undoubtedly the reader's reactions will be varied; however, if this effort proves a help in examining the creation in light of the present theory of evolution, it will have been worthwhile.

EVOLUTION

To date, although various idiosyncrasies may enter in, the investigations by the western civilizations trying to explain man's creation have led to three principal ideologies: First, the creation, as written in Genesis, is entirely acceptable. Followers of this philosophy are consequently called Creationists. Second, there is a group which rejects the Biblical account and tries to explain the creation as a natural continuance of inevitable forces which took millions, even billions, of years to develop into the present state. These Evolutionists accept the theory of natural inevitability—commonly called evolution. Finally, some individuals feel that the Bible leaves enough leeway for the reader's interpretation to include both the Biblical and evolutionary concepts of creation.

In embarking on a task of dealing with such confusion and controversy by comparing these various theories, it is absolutely imperative to understand what is meant by the term "evolution". Evolution is an alternative theory for explaining the development of life on earth. It contends that after the earth was formed and water filled the oceans, the simple gases of the atmosphere somehow joined together to form the first basic elements of life. From this original life form all of the various complex creatures of today have evolved. A more concise look at the requirements of evolution yields three basic conditions¹: (1) All life forms of today have evolved from a common ancestor and their multiplication down through the ages was accompanied by changes in the physiological and structural composition. (2) These differences have arisen gradually through the course of millions of years. (3) Finally, these evolutionary processes are still in operation today; therefore, we are still evolving.

At first glance the briefly stated premises may look simple and readily comprehendable. However, to satisfy these conditions a highly complex set of scientific criteria must be met. Although the evolutionist may tend to present the case for evolution in a complicated manner to confuse the creationist, it must be realized that the backbone of these three conditions are not elementary and cannot be treated as such.

Too often, when people think of evolution, their primary thoughts are of Darwin and his writings on the subject. It is important to realize, although much publicity surrounds him, that this is only a small part of the whole evolutionary scheme. The theory of evolution is not the product, solely, of contemporary thought. Many ancient philosophers advocated some form of natural occurance for life without supernatural guidance. But still it is Darwin who is most closely associated with the resurgence of the evolutionary ideas in our modern era. At the mere mention of his name many people field the concept of an atheistic scientist bent upon disproving Genesis and all Biblical notions concerning the creation. Because of the misconception, it is only fair to take a brief look at the man, Charles Darwin, and see what motivated his resurgence of the evolutionary theory.

During the Middle Ages a unique relationship between the church and the educational institutions flourished. At this time the limited belief was presented that according to Genesis plants and animals could not undergo any significant modification or variation from one generation to the next.2 The phrase "bring forth..... after his kind" was taken literally to mean that within a specific grouping only highly related forms could bear offspring and there was no possibility of interbreeding between various groups. Today it can readily be seen that this conclusion is unreasonable. Many plants and animals have been crossed to produce new and stronger strains. The actual meaning of Genesis is that, although they may interbreed, a particular "kind" will still only produce a member of that related form even if interbreeding does yield a new combination of traits. Life does not result in individuals identical in appearance, but rather affords isolated groupings which undergo significant modification within their biological confines. This will be dealt with later. The point to remember now is the erroneous concept held by the world at the time of Darwin.

Unknown, or at least overlooked by most people, are the facts which surrounded the early life of Darwin. He grew up in a religious atmosphere and in the early 1800's entered Cambridge as a student of theology. During these studies he became subjected to, and finally accepted, the erroneous view concerning the phrase of bringing "forth after his kind", discussed in the preceding paragraph. A few years after entering school he became disenchanted and the urge to travel gripped him. When an opportunity

to sail around the world was offered him, he accepted it.3 It was on this historic voyage that the nucleus for his subsquent precepts was born. Having lived his life in Europe and being filled with this overly rigid interpretation of Genesis, he was totally unprepared for the varied forms of life he was to encounter in the other parts of the world. As Darwin observed these forms of life, he concluded that life had indeed migrated all over the world, and during this migration modifications in its physiological composition had, in fact, occurred. Both of these concepts were directly opposed to the beliefs he had been taught concerning the meaning of Genesis. And, as too often happens, when confronted with facts contrary to an earlier befief, rather than check for errors in the original theory, he completely abandoned it for a new theory. So Darwin's error was not in his observed data, but that he rejected the whole Biblical creation because it had been wrongly interpreted for him. He did not disprove Genesis; he merely discredited the narrow interpretation placed on it by his teachers. Darwin observed change within plants and animals and he mistook that for evidence of evolution. He also based his theory on appearances- one of the poorest criteria for classification.

Although one may not agree with his theory, it is extremely unfair to label Darwin as anything but a sincere and dedicated individual. Even though his data dealt primarily with the collection and classification of relatively modern forms of life and their respective fossils, the fully developed theory of evolution must provide an explanation for life's beginning and a method for diversification from its original form. To do this evolutionists rely on two basic requirements. As stated in the second condition of evolution, these changes from the original life form must take place gradually; therefore, the evolutionist must have time in which to work. To validate his theory the earth must be at least millions and preferably billions of years old. Also, the evolutionist is faced with the question of whether evolution is biologically possible. Can these chemical and physiological changes occur as he says they do? So now before us are the two basic postulates with which the evolutionist must contend: 1) The earth is millions of years old; and 2) These chemical and biological changes are possible. This article is devoted primarily to the objective evaluation- as far as consciously possible- of the proposed "proofs" of evolution in light of the scientific data now available and its subsequent reflection on the Bible. For this purpose, the subject has been broken into two general topics: the first dealing with the creation of the earth, and the second dealing with the beginning of life and mankind.

I. The Creation of the Earth

One point at which the creationist and the evolutionist find themselves in agreement is in the order of the creation. Both maintain that the universe was created before life and mankind. The number of theories which have been offered to explain the creation of our solar system are countless. Hundreds of such offerings have arisen and fallen by the wayside in the last two or three centuries. To deal with all of them would be a monumental work, if not impossible; therefore, this paper will limit itself to examining the theory having enjoyed the widest acceptance among evolutionists. Undoubtedly many have heard slightly differing theories, but most of them either follow this common form of elementary logic or are subject to the same basic analysis as the Nebular theory.

The initial format of the Nebular hypothesis emerged in the scientific writings during the early 1700's. It asserts that our solar system first existed as a gaseous cloud filled with cosmic dust. At first this cloud was rotating at a relatively slow speed. Because of various attracting forces the speed of the cloud began accelerating. Since these cosmic particles were of differing weights, they collected at various intervals from the center of rotation. The increased velocity caused the particles to move together into a cloud until compact bodies were formed. When the rotational speed of the bodies became constant, they were fixed in their present orbits around the center of mass (the sun). Eventually they began to cool off and settle into the solar system orbitals now observed. 4

Of all the points the evolutionists try to extend, the actual creation of the universe is probably the weakest. The Nebular theory is subjected to several such considerations—of which three major ones are presented here. First, the scientists who support this theory have no reasonably concrete explanation for what caused either the increase or decrease in acceleration of the spinning cloud while the planets were being formed. It is often attributed to the existence of some external force, which may not be too far from admitting the reality of a supernatural being.

A second criticism of this theory is found in the orbits of the

various moons in the solar system. Because of the revolving cloud all of the planets would be expected to end up rotating around the cloud in the same direction—and, in fact, they do. But this theory was also developed to include the formation of the moons which accompany the respective planets. Following the laws of momentum all of these satellites should also revolve around their mother planets in the same direction; yet, the data shows that 11 out of the 32 moons in our solar system orbit in the opposite direction. This retrograde orbit is evident in nearly 35 % of the moons; therefore, it can hardly be dismissed as insignificant, but neither can it be explained by the Nebular theory.

A concluding objection to this theory is equally applicable to many of the other theories. The proponents of the Nebular theory have not solved the problem of creation at all. They still want to start with some pre-created matter. The Nebular theory assumes that the cosmic dust and gases which constituted the cloud were just there. But where did they come from? The question can be postponed temporarily; yet, eventually one must return to the creation "ex nihilo" or from nothing. Evolutionists have not been able to explain the origin of matter. Some like to say it was formed by light waves, but then the question, "The light from where?". So the issue enters into a vicious circle which can only be answered by instantaneous creation "ex nihilo." To speak of creation from nothing is to refer to physical entities familiar to man. The universe was not made of anything man is able to grasp tangibly, but was created by the power and the word of God.

"Through faith we understand that the worlds were framed by the word of God, so that things which are seen were not made of things which do appear." Heb. 11:3.

Whether one believes the Bible or not, the creation of the universe has no satisfactory alternative means of birth.

Although it would appear to be very important and equally interesting, relatively little publicity has been given the formation of the universe. This dearth of expression is undoubtedly due to a recognized lack of data and even any truly acceptable theory for consideration. The vital link in the Nebular theory-- that the earth be millions of years old-- has, however, been the target of throngs

of scientific data and publicity in recent years. The evolutionist can avoid the earth's creation and not totally destroy his theory; but the question of its age must be met head on and conquered if he is to proceed at all.

Sedimentation and Stratification

One of the evolutionist's most trusted authorities in the sphere of age determination is the geologist. Geologists have found throughout the earth vast layers of sediment. They account for these formations by postulating that over a long period of time the natural process of erosion has developed such deposits. From this reasoning the evolutionists are led to conclude that the earth must be several billion years old for such extensive erosion to have taken place. But what actually has the geologist found?

The data and observations the geologists have presented are, for the most part, accurate and valid. But is existence for billions of years the only way to account for these observations? The geologist assumes that this sedimentation was caused by relatively small amounts of energy expended over a long period of time (natural erosion). But is it not feasible that the same results could be achieved with a large amount of energy expended over a short period of time? Certainly many accounts have been recorded of flash floods doing great damage and destruction over a period of just a few minutes. The same amount of damage or work would have taken years if left to the natural forces of erosion; therefore, it is just to examine the basic premise—that sedimentation could have been caused rapidly, rather than over the course of several billion years. But does that premise hold under the actual geological data?

While digging in sedimentation excavations which were supposedly formed over billions of years, Geologists have found whole trees standing virtually intact. 6 These trees stood several feet tall and transversed many sedimentary layers. If one claims that these layers were deposited over a vast period of time, he is then forced into contending that these trees stood virtually unmoved for millions of years while the sediment built up around them. Also, if this were the case, the geologist should find numerous examples of half submerged trees in the process of being buried; but the data gathered and simple logic does not support this. Could not these trees be readily accounted for by the

rapid deposit of many feet of sediment before the trees had an opportunity to change or decay?

Often the types of sediment found in a particular region will have no specific tie with that area. In other words, the source of this particular element would have to have been a great distance form the place of actual sedimentation. The path which these sedimentary elements traveled cannot be wholly explained by the normal river flow, because much of this translocation has occurred contrary or perpendicular to the flow of the rivers. In addition, many of these deposits cover a much wider area than would normally be ascribed to a river. But here again we have two conditions easily reconciled by a rapid deluge of water.

Two more brief observations for consideration of geological aging may be found in the relative depths of the sedimentation phenomena. A few years ago in an operation called "Operation Mohole", man attempted to drill into the center of the earth and gather data about its composition. The project's objectives were later modified; however, they still present an interesting observation. Before starting to drill, it was predicted that considerable sedimentation would be found on the floor of the ocean due to the millions of years of erosion. In actuality only about 1/10 of the projected amount of sediment was found.

Also along this consideration, it has been calculated that about 14,000,000 tons of meteor dust falls on the earth every year. Since the vast surface area of the earth spreads the dust so thin, most people never realize its existence. However, in the course of several billion years a sizable amount of such dust would accumulate. Such an accumulation would cause considerable alteration in the nickel concentration of the earth's crust. (Meteor dust contains about 300 times as much nickel as ordinary rock.) Yet no such deposits or concentration increases have been found. The lack of adequate sediment in both of these cases indicates the possible existence of a serious flaw in the geological timetable.

By now the reader has probably guessed what conclusions might be drawn about sedimentation. But the purpose of this work is not to expound on private conclusions. The intent is to assist the reader in seeing the facts and allowing him to conclude what he may. Doing workable experiments on sedimentation is very difficult, especially on past erosions; therefore, conclusive data showing undeniably that the phenomena of sedimentation was caused by a flood is not available. But the consideration is completely feasible and in keeping with the geological data-while the geologist's theory of slow erosion is anything but decisive.

Every scientist must admit the enormous power of water; yet, with all this in mind, the scientific world, as a whole, is unwilling to allow the Biblical accounts of flooding to answer the sedimentation question. Undoubtedly the great flood of Noah's time would have contained enough power to cause the observed geological upheavals. However, one is not even required to rely on this single event. The earth has flooded twice, once in the time of Noah and also in the very beginning of time.

"And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters." Gen. 1:2. "And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear; and it was so." Gen. 1:9.

The concept of flooding is an entire topic within itself and cannot be adequately handled here; nevertheless, it is well to keep the concept in mind as evaluation is made of other evolutionary contentions. It is abundantly clear that the geological conformation of the earth has undergone considerable shifting and stratification; however, it is not equally clear that these observations must be due to the natural working of billions of years.

Gap Theory

The reasoning concerning the age of the earth is not merely divided into two camps: those who interpret Genesis literally and those who believe the earth is billions of years old. Another class of thinking began to gain prestige in the early nineteenth century. The philosophy, called the "gap theory", has gained much popularity among religious circles because it allows one to reconcile Genesis with the evolutionist's contentions.

They based their thinking on Gen. 1:1,2.

"In the beginning God created the heaven and the earth. And the earth was without form, and void: and

darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters."

They point out: 1) We are not told how much time elapsed while the earth was without form and void; thus, a possible gap in time is evident. 2) They also postulate that the creation account was merely a refashioning of the earth. God destroyed a first creation when he cast Satan out of heaven. Thus, all of the old fossils found today are actually from this first creation and all geological sedimentation occurred during the unknown duration between the two creations. They feel Gen. 1:2 should read "And the earth became..." rather than "And the earth was..."

It would be a gross mistake to dismiss the holders of this theory as merely maintaining a "ridiculous point of view" since many sincere and devout people hold to all or part of this concept. No matter what one believes, he can easily see that this is an intermediate conclusion, standing between the creationists and the evolutionists. Since the "gap theory" can be set forth in the two previously-stated conditions, it is only logical that each one be examined and its value judged.

The first supposition, that Gen. 1:2 covers a great deal of time, could initially seem quite logical and valid. Genesis simply says that God made "the heaven and the earth" and no time element is ever mentioned. But this is not the only scripture on the subject. Although Genesis does not seem to specifically include the creation of the heaven and earth within the six days of creation. Exodus 20:11 does.

"For in six days the Lord made heaven and earth, the sea and all that in them is, and rested the seventh day; wherefore the Lord blessed the sabbath day and hallowed it."

The opening phrase of this verse seems infinitely clear and makes it unbearably difficult to squeeze billions of years between the formation of the earth and the actual creation—as the "gap theory" proposes.

The second postulation of the theory holds no better than the first. It tries to reconcile the finding of ancient fossils by saying they existed and died during this gap period. Therefore, life must have grown and multiplied during this era. From every indication,

the fossils (which have been discovered) were left by a life process exactly like-- or at least very similar to-- ours. These fossils certainly must have been subjected to the same metabolic and biological functions as the bones of today. However, it is of great interest to note that light was not exhibited until Gen. 1:3. With these observations a holder of the "gap theory" must claim; 1) This original life form lived without a source of light, or 2) God created and then destroyed His original light source when he destroyed his first creation. The first of these two options is clearly ridiculous. Anyone with any biological knowledge at all realizes that life in the absence of light would not produce the kind of fossils found today. As for the second option, since these fossils must have been produced by a life system like ours, to say that God destroyed a first creation is to say that He destroyed one creation and then recreated another just like the original. This form of reasoning puts God in a very dubious situation. Either the first creation was destroyed for no reason at all, or the second creation was recreated with the same inadequacies as the first. From this brief encounter it has been demonstrated how easily a series of assumptions can lead to obsurd implications. For those still having trouble justifying the fossils which are labeled millions of years old, an entire section has been devoted to the fossils themselves and another to the various dating techniques. Hopefully those sections will prove helpful in showing that the "gap theory" is not at all necessary and, what is more, is not even rational.

Day Age Theory

Another prominent consideration in the attempt to reconcile geological dating with the Bible is commonly called the "Day Age Theory". The context of this belief is the assertion that the six days of creation were not literally of 24 hour duration each, but were, instead, vast ages of time. These great durations account for the seemingly old age of the earth and still enable one to accept the Genesis account; thus, holding fast to the rest of the Bible. One of the primary bases for their thinking lies in 2 Peter 3:8.

"But, beloved, be not ignorant of this one thing, that one day is with the Lord as a thousand years, and a thousand years as one day."

From this they point out that God has no real concept of time.

Therefore, it would seem highly improbable that He would limit the creation to six 24 hour days.

Proponents of this theory also like to refer back to the original Hebrew manuscripts where the word for day is "YOM". They point out that this word is also used elsewhere in the Bible where it means a time lasting over 24 hours. In the Old Testament it can be found translated over 50 different ways. The word is utilized nearly 1500 times. Of these "YOM" is translated to mean a solar day almost 1200 times. Although this is a high percentage, there are still about 300 times that the word means a duration longer than one day, 9 Because of this proponents of this theory ask: How can the creationist be sure the days referred to in Genesis 1 should be translated as 24 hour days? The best insight to this question can be gained by a closer look at the usage of the word in the Bible. Each time "YOM" is preceded by a definite number it is intended to mean a day of 24 hour duration. In the creation account one finds the references to the days of creation preceded by such numerical values. Therefore the claim that "YOM" in Genesis 1 should mean anything other than a 24 hour period has no Biblical precedent as this theory would have us believe.

Another fundamental objection to this theory is found in Genesis itself.

"And God saw the light, that it was good: and God divided the light from the darkness. And God called the light Day, and the darkness he called Night. And the evening and the morning were the first day."

Gen. 1:4.5.

Here there is a division of the light into Day and Night-- in fact not only Day and Night, but also morning and evening. Believers of the "Day Age Theory" claim that the day referred to in Genesis 1 was not like twentieth century days and, inasmuch as the sun moon and stars were not created until the fourth day, the first three days may have exhibited some differences. But God said these differences did not effect the length of duration. Although the sun was not created until the fourth day, each day of creation still had a morning and an evening. This denotes a light and dark period for each day. If one contends that these days were in fact vast ages of time, then he must also contend that there was a division of each age into a long duration of light followed by a long period of darkness. The evolutionist's favorite figure is to contend that these

days were 500,000 years in length. This means with only one morning and evening per day the earth was subjected to 250,000 years of light followed by 250,000 years of darkness. Even a basic knowledge of plant life allows one to see the fatal effect this long period of darkness would have on the third day's creation.

When one looks at: 1) the difficulty in trying to reconcile the "Day Age theory" with the basic biological needs of life, and 2) the fact that, since the word "YOM" is preceded by a definite number, there is no Biblical precedent for translating it any other way than a 24 hour day, the "Day Age Theory" begins to emerge as another attempt by man to circumvent the Biblical account of creation-rather than to objectively evaluate the most obvious conclusion.

Thermodynamics

Without question, two of the hardest facts for the evolutionist to reconcile with his creation theory are the first two laws of thermodynamics. The word "thermodynamics" itself means the "power of heat". The concept of thermodynamics can most simply be conveyed as the study of "heat energy". As with many other words, the meaning has grown to incorporate more than was originally contained at inception. Heat is one of many forms of energy—other forms include mechanical energy, electrical energy, light energy, chemical energy and sound energy. These various forms of energy are readily interconverted among each other. The study of the relationships between heat and the other forms of energy gives a more complete picture of the thermodynamic concepts. 10

Since thermodynamics deals with the interrelationships of energy forms, its great relevance to the creation is seen by realizing the vast amounts of energy the formation of the universe required. With this realization in mind it only seems expedient that the concept of thermodynamics enter into a consideration of how the creation took place.

In the course of thermodynamic studies two basic laws have been found which are fundamental to all scientific fields and, therefore, must be held as undeniably true by the scientific world. One must accept the validity of these laws because they are

universally upheld throughout nature. If they are not true, science is unfounded and this is obviously an obsurd consideration. The first law, dealing with the conservation of energy and mass, states: Although energy and matter can be changed and interconverted. the total amount of energy and mass in the universe remains constant. In other words, energy and mass cannot actually be created or destroyed, merely transformed. The second law deals with the flow of energy. Any careful observer has noted that, when a hot object comes into contact with a cooler object, heat tends to flow from the hotter object into the cooler one. Eventually, if left in contact, both objects become the same temperature. The second law states: When energy is flowing from one object to another, some of that energy will be lost. The "lost" energy is not destroyed, but is instead only rendered unavailable for further usage. It is this loss of available energy which the scientists call "work". Now, how do these rather vague concepts effect the theories of creation?

A more detailed examination of the first law reveals that although energy and mass may change forms, the total sum of the two is always constant. Neither can be created from nothing (ex nihilo). A look at the scientific modes of evolution cannot reconcile this fact at all. The evolutionist, even though he has no explanation, must assume that somewhere in time, energy and matter were created. But this creation would have been in direct contradiction to the basic law under consideration and accepted by all phases of science. So it would appear that an unexplainable force allowed a temporary reversal of this law long enough for the creation to take place.

Since matter and energy cannot be created, it would appear the creation should be finished and no longer in progress. It is interesting to note that, after all the scientific theory is evaluated, the only conclusion one can reach is one already set forth in the Rible.

"Thus the heavens and the earth were finished, and all the host of them. And on the seventh day God ended his work which he had made; and he rested on the seventh day from all his work which he had made."

Gen.2:1,2.

We also find the same concept of conservation of mass and energy set forth in the New Testament.

"But the heavens and the earth which are now, by the same word are kept in store, reserved unto fire against the day of judgement and perdition of ungodly men."

2 Peter 3:7.

Here are two classic examples of a law of God and a law of science agreeing with each other and both completely contradicting the theory of evolution.

The second law of thermodynamics is considerably more difficult to understand, but no less worthy of careful examination. If, as the law states, some energy is rendered unrecoverable as it flows from one body to another, the universe is constantly losing some of its usable energy. Every day huge quantities of energy are transferred from one body to another: in the form of heat from a combustion engine, in the small degrees of energy found in the living cell, or in an infinite number of other fashions. At the end of each day there is less energy available for work than at the beginning of that day. It then logically follows, with this drain on the supply, eventually the universe will run out of energy. This loss of energy is often described as an increase in the disorder of the universe. As the universe loses some of its energy, there is an increase in the disorder of its natural components. Science has given a name to this disordering process; it is called "entropy". 12. So the true relevance of the second law is that this lose of energy or increase of entropy brings about a decrease in the organization of the universe.

All theories of creation must at some time deal with the creation of matter and energy. Some try to delay this confrontation by saying the earth came from a distant star. But then the question of this star's origin must be answered. Science says the creation of the earth and its resources came from the gases which were discussed when examining the Nebular theory. Taking these simple gaseous elements and forming the complex and much larger compounds of our environment is a process of extreme organization. It is difficult to fathom just how much energy is organized or stored into the mass of the universe. It has been estimated that one gram of mass (one gram equals .03527 oz.) contains as much energy as is produced by Niagra Falls in the course of 2.5 days. When a person realizes the huge amount of mass included in just one of our planets, he can quickly appreciate the astronomical quantities of energy with which the creation must

deal. Yet, the very concept of organization and storage of energy is directly contrary to this basic law of science. Evolutionary creation says that, given enough time, the elements would naturally align themselves into their present, highly organized order. But it must be noted that this natural ordering would be exactly opposed to the increase in entropy observed in nature.

A very crude example of how entropy strains the theory of the evolutionist may be derived using a piece of wood. A given piece of wood may meet with two distinct fates: 1) It may lay and rot, or 2) it may be made into part of a useful structure. Left only to nature, we know that the wood will undergo an increase in disorder and decompose; but, if it is acted upon by an outside force, such as a carpenter, it may be retained in an orderly structure. If one uses the same logic evolutionists employ about the creation, one would have to conclude that given enough time the piece of wood would transform itself into an organized structure purely under the forces of nature without the guidance of an outside being. One can easily see the ridiculous nature of this supposition. Yet, it would be infinitely easier for that piece of wood to become a structure, left to the workings of nature, than for the simple gases supposedly present during creation to be made into the complex compounds of today's earth-

Some try to justify these discrepancies by saying the second law of thermodynamics did not come into effect until after the creation. There is a strong possibility they are right. It should be noted that this increase in entropy or disorder is a basic concept behind the degeneration and aging processes of the universe. Were it not for the loss of energy and increasing disorder set forth in this law, neither the universe nor its components would be subject to decay, age and eventually death. With this understanding, it would be very difficult for the creationist to contend that this law has always applied to man. Many indications support the idea that death was not an element of man's life-- and possibly the universe—until Gen. 3:17-19.

"And unto Adam he said, Because thou hast harkened unto the voice of thy wife, and hast eaten of the tree, of which I commanded thee, saying, Thou shalt not eat of it: cursed is the ground for thy sake; in sorrow shalt thou eat of it all the days of thy life; Thorns also and thistles shall it bring forth to thee; and thou shalt eat the herb of the field; In the sweat of thy face shalt thou eat bread, till thou return unto the ground; for out of it wast thou taken: for dust thou art, and unto dust shalt thou return."

This concept is also upheld by the consideration of two more scriptures.

"Of old hast thou laid the foundation of the earth: and the heavens are the work of thy hands. They shall perish, but thou shalt endure: yea, all of them shall wax old like a garment; as a vesture shalt thou change them, and they shall be changed: But thou art the same, and thy years shall have no end."

Psalms 102:25-27.

"For the creature was made subject to vanity, not willingly, but by reason of him who hath subjected the same in hope, Because the creature itself also shall be delivered from the bondage of corruption into the glorious liberty of the children of God." Rom.8:20,21.

From these passages one can only conclude that man's subjection to death (and in turn the second law of thermodynamics) did not begin until the curse was pronounced in the third chapter of Genesis. This fact is very pertinent in the consideration of the evolutionary, because it leaves the evolutionist in a state of ambiguity. If he claims the second law of thermodynamics has always been in effect, the creation by natural functions would be impossible. If he claims the law came into effect after the creation, he has no scientific explanation for such a reversal of nature. Under the first possibility he needs a supernatural power to allow the creation to take order. Under the second alternative, he needs a supernatural power to reverse a fundamental axiom of the universe, the second law of thermodynamics. Neither choice is very encouraging for the evolutionist.

To briefly summarize the concepts of these two basic laws of science: The total amount of mass and energy in the universe is constant, but every day some of this energy is rendered unavailable for further use. It is this loss of usable energy that causes a steady degeneration of the universe and its components. Creation requires both an increase in the energy and mass level and a generation of order in the universe. Both of these conditions

are plainly in direct contradiction with a basic set of scientific laws- the laws of thermodynamics.

II. The Development of Life

Even though the preceding discussion concerning the creation of the universe was highly limited, a sufficient background was supplied to now deal with the perplexing problem of biological evolution intelligently. To keep from straying from our original objective it is useful to restate the three basic conditions for evolution as presented earlier: 1) The plants and animals of today have all evolved form a common ancestor and their multiplication down through the ages was accompanied by changes in their physiological and structural composition. 2) The differences among life forms have arisen gradually over the course of millions years. 3) The evolutionary processes are in operation today-- therefore, we are still evolving. Originally evolution was presented as merely the devolopment of existing life. But was quickly added to by the writings of various men. These writings proposed various methods by which the initial life form may have arose. Although evolution is, technically, only the development of life, its liberal usage has made it synonymous with both the creation and development of life from non-living matter. This necessitates that the evolutionist propose: first, a mechanism by which this initial life form was produced, and secondly, a method by which initial forms of life could change and diversify into all the varied forms now witnessed. In this section the suggested mechanisms for the origin of life and its subsequent diversification will be examined along with some of the evidences which the evolutionist submits as "proof" of his postulates.

Origin of Life (Spontaneous Generation)

Darwin's initial findings were concerned with life at present. However, from his investigations speculation and curiosity began to grow. Two or three hundred years ago the beginning of all life was explained by the theory of "spontaneous generation"—claiming that life spontaneously arose from inorganic matter over the period of a single generation. Early scientists based this theory on the observation of small organisms being found in dead and decaying matter. Now it is universally

accepted that these organisms do not arise spontaneously, but are derived from a seed or life form of their own kind. Modern science readily acknowledges the absurdity of spontaneous generation. Ironically, however, they have instigated a similar precept to explain how the common evolutionary form of life originally started. They advocate that life sprang out of a mixture of gases and electrical energy.

Let us look at the theory presented as an explanation for life's beginning: During the discussion of the earth's creation, it was pointed out in the Nebular theory that the universe was supposedly made up of cosmic dust and gases—methane, ammonia and water vapor. Evolutionists claim that these gases were responsible for the creation of life. Over a long period of time, with the energy provided by numerous electrical charges (lightning storms), the gases were changed into chemical sub-units essential for life. Since proteins are chains of smaller chemical sub-units, amino acids, it is postulated that these sub-units joined together in a multitude of ways until just the right combination was found and the first substance of life arose. From this basic beginning the common ancestor to all life was formed. It sounds simple, neat and logical. Different sources may vary their versions slightly, but this is the backbone of their arguments.

News reports have carried several accounts of the manner in which these theories have been experimentally supported. In the early 1950's a man named Miller conducted an experiment in which he placed the three gases (methane, ammonia and water) in a closed system and subjected them to electrical charges. After a short period of time he found that these compounds had been partially converted into protein sub-units, amino acids. More recently, reports of how life has been produced in a test tube from non-living matter have flourished. In the face of these findings, does it not appear probable that this is in fact the key to the origin of life? But one should check the validity—and yes, even probability—of these concepts. If they are valid, they certainly can withstand careful scrutiny.

Even if one considers life as mere'y a one celled organism—as bacteria or protozoa—rather than the multicellular forms familiar to most people, the complexity of that life is virtually impossible for man to grasp. Just a passing glance at a cell reveals: membranes, chromosomes, mitochondria, endoplasmic reticulum,

lysosomes, golgi bodies, a nucleus, vacuoles, cytoplasm, centrosomes, ribosomes, desomosomes, pinocytric vesicles, and so forth. These in turn are made of such compounds as proteins, carbohydrates, lipids, phospholipids, deoxyribonucleic acid, ribonucleic acid, inorganic salts, amiono acids, organic acids and many others. The pointing out of these specific compounds could be endless. It is not needful, or even desirable, to delve into an explanation of these rather vague and exotic sounding terms. The purpose here is only to convey in some small way the literally billions of strucutral and molecular complexities which must be met for life to proceed at all.

Reviewing one of the countless number of proteins, insulin, which is familiar to most indicates that it is a carbohydrate metabolizing hormone whose structure has been chemically determined. Insulin is known to be a chain of 51 amino acid subunits. ¹⁴ However, this is not a random chain. The amino acids must be arranged in an exact order for the structure to function biologically. The statistical probability that this exact order be met be chance, or spontaneous generation, is certainly not favorable for its formation. Let us arbitrarily say that the exact sequence, by chance, would be hit once in every 10,000 tries. Keep this figure in mind as another protein is examined.

Hemoglobin is a common protein found in the red blood cells and is vital to the respiratory function. Compared with insulin, one can make the crude approximation that hemoglobin is eleven times larger. Therefore, it should contain approximately 550 amino acid sub-units. Again these amino acids must be in exact order to function. Since there is a larger sequence, the probability of this protein being formed by chance is even less than for insulin. If one hypothesizes the probability of hemoglobin being formed as 1 in 1,000,000, he sees that the probability of forming both insulin and hemoglobin rises to 1 in 10,000,000,000. This probability statistic continues to rise as one adds each component of the living organism until it reaches an almost infinite improbability. (A person with some scientific background may realize that evolutionists claim life started with a virus, bacteria or other unicellular organism-- most of which contain neither insulin of hemoglobin. But all must admit that these microorganisms do contain proteins of comparable and even greater complexity. So the same statistical reasoning would apply to them. Insulin and hemoglobin were used as examples because of their widespread familiarity.)

The complexity of the cell is not restricted merely to proteins, but transcends all other cellular components. For instance, the complexity of the deoxyribonucleic acid (DNA) should at least be mentioned. It is the material within the chromosome which carries the genetic heredity of an individual. This molecule is sufficiently complicated to give rise to the vast differences within our population today. If life were started by chance, would not a simpler process have been instigated? Chance would tend to settle on the simplest mechanism, and the cell truly does not fit that criteria. Yet, even with this staggering statistical improbability many people are willing to rely on the slim possibility that life is the product of chance and feel that given enough time the improbable will become the inevitable. Although their argument is weak, it does have that single statistical possibility; therefore, let us examine the issue in a different respect than probabilities.

A second argument reverts back to the second law of thermodynamics discussed with reference to the creation of the universe. Briefly this law states: The disorder of the universe is steadily increasing. Even a brief look at the evolution of life labels this formation not as a disordering process, but as a highly complex and energy demanding process for the organization of matter. Here again the scientist claims that evolution and the second law of thermodynamics are both true-- yet they are in direct opposition to each other.

A third consideration concerning the formation of life is that of solar radiation. Radiation, whether it be solar or atomic, contains a potential hazard to life. The sun is constantly emitting rays which cause harmful effects when focused on life. Our continued survival on earth can be attributed to the atmosphere which surrounds our planet, acting as a sun filter, stopping most harmful rays and still admiting its beneficial light. Recall that on the various space flights significant attention was given to the problem of radiation. In fact, the space capsules were placed in a slight roll to avoid any side of the craft being exposed to the radiation and heat build up for undue periods of time. From this it is obvious that the scientific world respects the potential hazard

radiation holds for the composition of materials. But just how this radiation can be harmful to life is what holds our attention now.

Laboratory experiments using X-ray, ultraviolet and infrared radiation have produced both fatal and harmful effects on plants and animals. Radiation is able to break the chemical bonds which hold the protein, DNA and other components of the cell together. As these bonds are broken, the cellular organization becomes chaotic and its functions cease. In basic terminology radiation is dangerous because it degenerates the various complex units of the cell. The sun emits a radiation in the ultraviolet range (4000 Angstroms and below) which will break many of the organic bonds so essential to life. When these bonds are broken, harmful effects are inevitable since normal life processes have been interupted. The main point to remember: radiation breaks the very bonds vital to life.

In the evolutionist's claim that life arose from a mixture of methane, ammonia and water vapor, no mention is made of oxygen. It is valid to assume that oxygen is not essential to life because many forms of life can live without it and to some it is even toxic. However, today our atmosphere is not made of these three gases—and fortunately so, because such an atmosphere would not give the protection now enjoyed against radiation. Science claims that the three gases were synthesized into proteins using the energy form the constructive forces of lightning. Yet, under those very conditions the destructiveness of solar radiation would be many times more forceful than any power lightning could create.

Evolution submits that small bacteria and plants of the sea were formed first and when they had given off sufficient oxygen and other atmospheric gases to create a protective shield against radiation, life began to grow on land. But evolutionist fail to realize that without protection from solar radiation even the proteins and DNA needed for bacterial and unicellular growth could not have been formed. So evolutionists are faced with another perplexing problem. 1) The present atmosphere would not supply an environment with high enough concentrations of methane and ammonia from which to build the cellular components, but 2) without the present type of atmosphere, solar radiation would exhibit an enormous destructive potential.

At the beginning of this section two experiments were

mentioned: one by Miller, and the other, the creation of life in a test tube. It is worthwhile to now discuss both in more detail: the first because any student taking a science course will be faced with it eventually; and the latter because virtually all have heard or read of it.

Miller's experiment was a very simple and basic procedure in actual theory. This investigation showed that if methane, ammonia and water were placed together and subjected intermittently to an electrical shock, they could form a small amount of amino acids.¹⁶ This was immediately taken as a "proof" of the evolutionist's contention. However, as so often is the case, a second and closer examination places its significance in question. First, Miller used selected compounds- thus ruling out many of the impurities which would exist under natural conditions and could easily block the chemical formation of the amino acids. Second, he used a closed system. Under normal conditions the compounds would have undoubtedly been in lesser concentration and free to move about randomly. In Miller's experiment they were confined in a container, so their intermingling and ultimate interaction was not subjected to the high rate of improbability discussed earlier. Third. Miller did not subject his mixture to radiation. He assumed the initial atmosphere was made of the three gases and (as pointed out earlier) under those conditions solar radiation would have been a powerful force. If Miller had subjected his process to radiation, his results would have certainly been effected, but without radiation how can this experiment be set as evidence for the origin of life? (Since Miller's work, others have conducted similar procedures with the addition of radiation, ultraviolet light. The findings indicate that this radiation may, in fact, slightly enhance the formation of some amino acids. However, it has a totally devastating effect on any protein conformation which might arise. So while the initial synthesis of the amino acid sub-units might not be harmed by the radiation, the ultimate chance of protein and, consequently, life formation is minimized.) A fourth point (which those with some background in chemistry will find interesting) is that Miller started with substances in the reduced state. If life was originally to/depend on sunlight for its energy, then a process similar to present day photosynthesis would be the logical expectation. However, such a process utilizes chemically oxidized forms to fulfill its organic requirements. Miller started with compounds

which would give him his desired results, not those which would be scientifically logical for life. After these considerations Miller's work takes on its true form: it was an interesting and important exercise in chemical synthesis, but a far cry from the absolute "proof" of evolution it is held up to be by the evolutionist.

The experiments dealing with the creation of life in the test tube are considerably more complex than Miller's procedures. Aside from space travel probably no other scientific endeavor has been followed more closely in the last decade by the public than the creation of life in the laboratory. A tremendous amount of curiosity and controversy surrounded the initial reports of life creation during the late 1950's and 1960's. Before going into more detail as to what actually took place, be assured that life was not created; and you will find virtually no scientist who now feels that it was. Most of those who claimed life creation were uninformed, headline-seeking journalists.

Although several experiments concerning life formation seemed to hit the scene at about the same time, they were all basically similar. So here the most prominent one, done by Arthur Kornberg of Stanford, will be dealt with. As mentioned earlier, DNA is the carrier of the genetic and hereditary characteristics passed on through each generation. The reason it is able to pass from generation to generation is that it posesses a unique ability for replicating itself in identical form. This DNA was the molecule Kornberg was trying to reproduce. Within the cell it replicates by:

1) using the old DNA as a template or blueprint; 2) the use of an enzyme called DNA polymerase which aids in the production of new DNA; and 3) the use of numerous other enzymes and available DNA components.

In essence, Kornberg was able to move this natural process out of the cell. In the test tube he placed all the chemical components needed to make DNA. But before replication took place he found that he must add: 1) a DNA template; 2) DNA polymerase; 3) various ions and 4) trace enzymes. Once these conditions were met, some replication could be observed. Actually DNA was not being produced from completely inorganic matter, because old DNA was essential before replication took place. Kornberg did not find a way for manual production; he merely created cellular conditions outside the cell and observed

the natural process at work. Even then he did not see the creation of life, but rather the mechanical method of DNA replication. Kornberg had an excellent experiment in DNA replication, not in DNA creation.

Even scientists and most evolutionists must admit that no truly satisfactory scheme has been proposed for the appearance of the initial life form. After looking at the infinitely high improbability against such a process and the inability of creating such an occurrence in the laboratory, even the most ardent evolutionist must resort to speculation and guesswork when this field of discussion arises. The creationists have no additional information on the subject either. They are only told that God spoke and life arose. The subject must be left there by the evolutionists because they have no alternative and by the creationists because they have faith.

Genetic Variability

Although it depends on the earth being billions of years old and life originating from inorganic sources, evolution itself is the exercising of *unlimited genetic variability*. Before proceeding blindly, let us examine the literal meaning of "genetic variability" in light of the background set forth.

In the previous discussion of Darwin, it was noted the commonly-held belief of his time was that each form of life produced offspring identical to the parent- a very strict interpretation of the phrase "after his kind". This left no room for variation among species. They felt that God created each individual species with certain unique features and with no other possibilities. So Darwin was astonished on his journey to find such variation among related life forms. When he saw these obvious cases of variation, he rejected his former teaching and chose a diametrically opposed view. He contended that genetic variations were, in fact, unlimited and all possible forms could be produced. With this conclusion Darwin postulated that, once life was formed, constant variation from this original form would be observed and eventually sufficient variation would allow the growth of the multidivergent forms of modern life. Concisely stated, he felt that all life could come from one form due to "unlimited genetic variability"

On the surface this theory also looks appealing. Anyone must admit there are variations in life forms; so, given enough time, is it not possible that these variations started with one initial form and led to all the varied forms seen today—and yes, even to man? Early evolutionists, in their attempts to find methods for explaining evolution, made some gravely erroneous suppositions. Now many of them are so obviously wrong that the scientific world must reject them, even though they stubbornly cling to others.

One of the most popular suppositions was that of "acquired characteristics". The theory of acquired characteristics stated that traits are acquired by a plant or animal during its lifetime and are then passed on to the next generation. This theory was first formally postulated by Lamark. He extended it to say that over many generations those characteristics which were used would develop further and any not used would eventually degenerate and disappear. This theory quite conveniently fit into Darwin's hypothesis. Darwin said that all species came, through variation, from an initial form. Lamark said those variations which were used would be preserved from generation to generation. These two postulates set the foundation for the theories of "survival of the fittest" and "natural selection".

Virtually all geneticists recognize the error of acquired characteristics. Numerous experiments have been conducted and all imply that this form of evolution is false. The classic experiment was done with rats. Over a long period of time (many generations) the tails of these rats were cut off. But never did the generation arrive when the rats were born without tails. The conclusion was that even if an organ was not used it would still appear in each new generation. The genetic composition was considered to be independent of the environmental and physical conditions surrounding the organism. So Lamark and his theory went by the wayside and evolutionists began looking for a new method for variation.

After some consideration evolutionists settled on the idea that these variations proposed by Darwin were not due to acquired characteristics, but rather to mutations. A mutation may be defined as a sudden hereditary change due to the alteration of one or more genes on the chromosome. In the process of transmitting hereditary information occasional errors are made with resulting deviations in the offspring. These alterations occur by chance in

nature and are not predictable. Yet, they presently form the evolutionist's explanation for continual variation. Scientists claim that, after the beginning of life, the life form was subjected to occasional mutations during multiplication. Some of these mutations were advantageous to the survival of the organism and with this advantage the organism would continue to flourish. After a duration of time the organism would undergo another beneficial mutation. This process could continue for millions of years until a highly organized realm of life had evolved. The various forms of life presently observed are actually the result of long chains of mutations. Although the mutations were sudden, they were sufficiently small in their effect to give the appearance and characteristics of gradual, continual change claimed by the evolutionists.

As with many preliminary observations, these concepts seem logical and sound, but mutations hold some serious deficiences for evolution. One good thing about mutations is their subjection to human examination. Therefore, man is able to work with them and learn some of their basic characteristics. Consider the following experimentally proven data about genetic mutations (followed by a brief summary if its significance): 1) Because their dramatic, and often tragic, effect in higher organisms is obvious, it is generally not realized that mutations, in reality, are fairly rare in occurrence. At the unicellular level, where evolution must begin, mutations are observed in between 1 in 100,000 and 1 in 10.000,000,000 chances.19 2) Mutations are almost always harmful. A leading geneticist stated that the percentage of mutations judged to be harmful is so high that it is virtually safe to assume that all mutations are destructive. 20 3) Most mutations are so destructive that they are fatal before the organism forms more than one cell; consequently, they are fatal before they are even detected. 4) Those mutations which do live usually lose some of their viability and fertility. 21 Therefore, their chances of passing the traits on to the next generation are at best minimal.

Now, in what light does this leave the mutational concept of evolution? Evolutionists must place their theory in the hands of a process which occurs about once in every million chances. Since mutations are virtually all harmful, the chance of getting a beneficial mutant would even be statistically much lower than one in a million. Then, if a mutation should wade through these improbabilities, it would experience decreased fertility and

probably be unable to pass the trait on to the next generation. As a final deterent to proving the theory of evolution through mutations, the example described here is for only one mutation. Literally billions of such mutations would be needed to develop the highly organized plants and animals. The chance of all this happening would be astronomically low. Certainly no scientist would tackle these odds in any area other than evolution.

The Fossil Record

Probably the most publicized evidence offered in support of the theory of evolution is found in the various fossil findings of "prehistoric" beings. These fossils serve as the major tool of argument for the evolutionist as he attempts to show the progressive evidence of evolution. Since they are certainly his most tangible evidence, the evolutionist feels their acceptance validates his theory. Unequivocally, the creationist must acknowledge the existence of these fossils, but this acknowledgment does not necessarily discredit supernatural guidance in the creation.

Evolutionists try to prove several things by the study of these fossils. The two major points they attempt to validate are: 1) Various forms of life, not found living today, did at one time exist on the earth. 2) These fossils give evidence of a systematic record of the evolutionary process by showing progressively more complex organization. From these two postulates one can easily see why the evolutionists are so content to examine fossils. The proving of these two points would strengthen their theory significantly.

Looking at the first condition set forth, the existence of exotic and often large, impressive "prehistoric" animals, often sends people into an unwarrented state of awe, rather than a rational and objective one. There is no quarrel with the supposition that various forms of life once existed, but are no longer living. In fact, there are several contemporary examples of species going to or nearing extinction. So it would be naively illogical to set this as an impossibility for the past. Without such possibilities one would be hard pressed to reconcile Num. 13:33 with present day observations.

"And there we saw the giants, the sons of Anak, which

come of the giants: and we were in our own sight as grasshoppers, and so we were in their sight."

"That also was accounted a land of giants: giants dwelt therein in old time; and the Ammonites called them Zamzummims;"

Deut. 2:20.

One would also have difficulty denying the existence of dinosaurs when any good museum contains a skeletal structure as conclusive evidence for their reality. But where does the Bible say a species could not become extinct? Here one is equally hard pressed for an answer. One of the major errors of past evaluations by both evolutionists and creationists alike has been an attempt to speak for God on the subject. God never said that various forms of life could not die out, so let us not say it for Him. Proof for the first postulate which the evolutionists try to gain from the fossils has no actual bearing on the issue of the creation.

Occasionally someone will recognize the validity of the fossil forms, but is unwilling to accept that these life forms ever actually existed on the earth. They feel God merely placed the fossils here on earth at the creation and never accompanied them with life. To spend a great deal of time on this issue is unnecessary, but consider this one point: In the polar regions entire corpses of such extinct animals have been found virtually intact. Their bones and flesh were still intact. Even more impressive, food was found in their stomachs. Now a proponent of this theory must claim that God also put this flesh and food in place without creating life in the animal. Such a series of events seems to place God in the role of trying to fool or mislead man. This must be considered a very dubious action to attribute to an all powerful God, especially in light of the rest of the creation.

Now concerning the second point "proven" from the fossils. Unlike the first, the second point cannot be accepted by the creationists. Should fossils prove to be the prints which show the pathway of evolution, it would certainly be a victory for the evolutionists. The public reads scientific accounts saying that the fossil record is conclusive evidence in favor of evolution; they see the actual fossils on exhibit; and they faithfully accept the evolutionary theory as truth. Too often the general public, through lack of knowledge or an unconscious desire to believe something,

accepts a theory as valid without checking the actual data available to them.

Contrary to the popular opinion, the fossil record concerning the progression of life is far from a cut and dried issue favoring the evolutionists. Even from an evolutionist's view point it must be conceded that the progressive chain contains many unaccountable gaps. But it would hurt the pride of the philosopher to conclude that these gaps were due to a weakness or fault in his theory. Fossil chronology uses the reasoning that if an animal is found with one degree of organization, and another with a higher level of organization, then the latter must be an evolvement from the former. Is it unreasonable to wonder if there were not just two different animals from the start?

One point of perplexity for the evolutionist has been the fossil's relationship to the sedimentation stratification. The evolutionists claim that the sedimentation chronological order-meaning that the layers of sediment on the bottom were deposited first. This seems to be a logical single premise; but, to project it one would also expect the fossils of each evolutionary era to be found in their appropriate layer of sediment. It could reasonably be precluded, too, that the earlier fossils would be contained in the lower layers of sediment and the more recent forms found in the upper layers. Both of these conclusions are logical extension of the evolutionist's view of earth and life formation. The only difficulty with this premise is that the data does not conclusively support it. Although isolated incidents can be cited which will support any idea, a significant number of archeological diggings, often unpublicized, have rendered a wide variety of results²²Both modern, complex fossils and very simple structures have been found at various levels of sedimentation This, interestingly enough, indicates 1) that both life forms may have always existed together, and 2) these observations cannot be fully explained by the progressive evolutionary concept.

Scientists, like others, sometimes get overly excited about a particularly good "find". A skull or a skeleton of a unique form is not sufficient to conclude that the entire civilization was like that, Visualize a future evolutionist finding the fossils of an abnormally tall person and immediately proclaiming that Americans were a super race of tall giants exhibiting some evolutionary progression. A few unique skeletal structures are certainly not a criteria for

placing an entire population in that category. Today many examples of skeletal defects may be found—due to birth deviations, disease, unusual diets and varied environments. Will future discovery of these forms lead to the conclusion that all of mankind was of this particular form? It would certainly be no more narrow-minded than many of the conclusions being drawn by modern paleontologists. If one wants to believe in evolution badly enough, he will eventually find evidence which will fit into his scheme, but is this objectively evaluating the data?

Another perplexing point for many to reconcile are the sketches which the evolutionists present as depicting the ancient ancestor of man. Drawings illustrating how man's facial development slowly evolved from the ape to modern man have often been published. These sketches were drawn by taking various skull fossils and placing flesh and hair on them in basically the same manner the evolutionists thought probable. The first model for these depictions inevitably has coarse skin with hair drawn over the skull; whereas, the final drawing, depicting modern man, is seen clean-shaven and well-groomed. If one visualizes the man in the first drawing with his hair combed and beard shaven, he will see an image not significantly unlike modern man. The point is that the only factual evidence the evolutionists have is the skull. From this foundation they fill in the details of a savage ape. It is entirely possible the fossil belonged to a race of mankind. Although the skull may be somewhat different from the structure of modern man, no Biblical criteria demands that every race of mankind which has lived on the earth must have exhibited the exact skeletal structure prevalent today. A large part of the variation between sketches must be attributed to the details formed in the mind of the evolutionist. The artwork shows significant imaginative ability, but does little to prove the theory of evolution.

Another argument supporting the evolutionary proposition deals with the comparison of various cranial volumes. Many scientists subscribed to the general assumption that the size of the brain was directly proportionate to the intelligence of the being. The larger the brain, the more intelligent the individual. This belief was partially brought on by the comparitive sizes of the brain of a man and the brain of an ape. Apes exhibited an average cranial volume of 500-700cc (cubic centimeters); whereas, man's

brain size is from 1200-1500cc.²³ The evolutionists, therefore, concluded: As man evolved from his primitive ancestor, his brain increased in volume as his intelligence increased. However, this bit of evolutionary evidence has fallen as more data became available.

Men with I.Q. levels of genius have been examined with cranial volumes ranging from 1000-2000cc, while apes have been found with cranial capacities up to 1200cc. In fact, the famous Neaenderthal man exhibited a cranial capacity larger than many modern day men-certainly not what the evolutionary scheme predict. 24. These drastic overlaps have caused scientists and evolutionists to abandon cranial measurements as a major way of determining intelligence. It is mentioned here only because some still presist in advocating it as proof of evolution. It is also an excellent example of how evidences, previously accepted as sound for evolution, tend to fall silently aside as more is learned about life and the universe.

Probably the most famous group of fossils comes from the Neanderthal man and his civilization. ²⁵The examination of these fossils bears some of the basic flaws as that of other findings. In this case some skeletal remains, especially skulls, were found which the evolutionists visualized as belonging to an evolutionary predecessor of man. From these findings the evolutionist was willing to assign both mental and spiritual characteristics to the being. He also postulated—merely from a few bones and relics found nearby which the creature might have used—about the culture and civilization of the being. All of this theorizing may prove quite interesting, but its make-up consists of immense speculation, sprinkled with an occasional fact. It is certainly not the positive link to man's evolution as the public is often led to believe.

Fossils have been developed to play a very critical role in the evolutionist's theory. Yet, despite all the research and speculation they hold some serious flaws when considered in light of the whole evolutionary concept. The validity of these relics rests not in their own being, but in the acceptance of other evolutionary concepts such as slow sedimentation and radiocarbon dating. If these concepts are false, then the validity of evolutionary fossils is thrown into serious question. The issue of sedimentation has already been discussed and dating techniqes are

analyzed in the next section. Fossils hold no independent validity for the theory of evolution.

Methods of Age Determination

Many, undoubtedly, are ready to question the time element. What about the scientific methods for dating fossils several million years old? Certainly it is crucial to include such a discussion in any consideration of modern evolution because such data will be among the first evidences the evolutionist will present to prove his theory.

The chemical tests used in age determination can be divided into two basic categories: simple elemental analysis and isotropic measurement. As the name suggests, elemental analysis is the examination of a particular element found in the fossil which, by its relative concentrations, will indicate the length of time the fossil has been exposed to a specific set of conditions. On the other hand isotopic measurement is by far the most prominent and most difficult. Therefore, it is of particular significance here. Fluorine and radiocarbon testing were chosen for discussion since they are prominent illustrations of both dating methods.

the Elemental analysis: Of two tests. fluorine unquestionably the easier to discuss; therefore, it will be handled first. The elemental method of fluorine testing was instigated as a way of determining the age of fossils and ancient relics discovered by the anthropologists. Its basic principles rely on the fact that bones which are left in the ground tend to absorb the element fluorine from the surrounding soil. Since fluorine was absorbed into the bones after death, it is reasoned that the fossils with a high concentration of fluorine content would be older than those with a lower concentration. Because of this comparative measurement, the fluorine test was acclaimed as a way of setting the age of a particular fossil. But, even under the most liberal applications, this method has proven to give only a relative classification of age.

Fluorine is not absorbed into the fossil at a universally constant rate. In order to test for the real and accurate age one would have to know, not only the amount of fluorine presently in the fossil, but also the rate at which it was absorbed. If the rate is unknown, then a true year count is impossible. Actual testing has indicated that the absorption rate is dependent on several factors, including the concentration of fluorine in the surrounding soil. Therefore, fluorine is absorbed at different rates, depending on its geographical

location. This may also be complicated since the fluorine concentration fluctuates with leaching, flooding and other external effects. If two fossils are found relatively close together, the amount of fluorine in each could give some general indication as to which is the oldest. However, little can be postulated as to their actual age. Evolutionists are slowly accepting this and fluorine tests are being used less and less as an age determining agent.

Isotopic measurement: This technique of dating fossils is held as undeniably true by many. Of all the methods discussed and accepted by the evolutionists radiocarbon dating (commonly designated as C-14) is one of the most widely used scientific tools for determining the age man and other life forms. It is certainly one of the more complex procedures to understand and explain. Consequently it troubles creationists more than other forms of chemical analysis. The results of these highly technical processes will certainly be among the first arguments facing the creationists. Therefore, the importance of understanding it cannot be Although radiocarbon is only one of several overemphasized. radioactive elements used in attempts to date ancient fossils, it is probably the most perplexing and certainly the most discussed. The following paragraphs will discuss some of the factors involved in this type of test and then will attempt to analyze them with the data now available.

Our universe contains countless numbers of stars and burning bodies. As these illuminate the skies, they shoot off into space small quanities of the matter they are burning. This released matter is usually comprised of hydrogen and helium. Each of these atoms are made of a set of negatively-charged particles and a set of positively-charged particles. As the atoms travel through space, they are acted upon by various external forces which tend to pull away the negatively-charged particle, leaving only the positively charged nucleus. The nucleus is then accelerated to tremendously high speeds. These high speed nuclei are commonly referred to as "cosmic rays"

Since the earth is oriented in space, it is subject to the bombardment of these cosmic rays. As these powerful particles enter our atmosphere, they often slam into atoms of oxygen and nitrogen. Nitrogen usually exhibits a relative mass of "14" while carbon has a mass of "12". When the cosmic rays strike the

nitrogen, they uniquely transform it into carbon. However, this is an unusual form of carbon in that it retains a mass of "14" rather than reverting to the normal mass of "12". This peculiarity enables a scientist to analyze the carbon molecules and determine if they are naturally occurring (with a mass of "12") or if they were formed through cosmic radiation-- resulting in a mass of "14". This carbon, with a mass of "14", is responsible for the notation "C-14". 26

The C-14 in the atmosphere is eventually incorporated into the various compounds of life, including carbon dioxide and sugars. Through normal life functions C-14 is distributed throughout plants and animals just like normal carbon, of mass "12". Obviously, upon death the animal or plant no longer takes in carbon (organic) compounds; therefore, it no longer consumes C-14.

Just as C-14 is spontaneously created in the atmosphere, it also degenerates. But, an important principle on which the dating process is built is that degeneration takes place at a constant rate. If one has 100 units of C-14, half of it will degenerate in about 5,700 years. Of the remaining units, half of that will decay in another 5,700 years. (For obvious reasons the period of 5,700 years is called the half life of C-14). So the process continues; but since one is constantly dividing, theoretically he should always find a trace of C-14 left in the sample.

Now if the amount of C-14 left in the fossil is measured and one can determine the amount of C-14 which was originally present, he can calculate the number of times the level of C-14 has been divided by two (or how many half life degenerations have transpired). For instance, if originally there were 100 units of C-14 in the fossil, but now there are only 6 units left, by crude calculations, it can be determined that the concentration of C-14 has been subjected to about four half life reductions (or divided by two four times). Since the age of the element is determined by multiplying the number of half life degenerations times the length of the half life, a researcher would calculate the age of this particular fossil as four times 5,700 years or 22,800 years old (Table I.). This is a very brief synopsis of how C-14 dating is carried out.

Obviously the less C-14 left in the fossil the older it is considered to be.

Time	Amount of C-14 left in the fossil	Age of the fossil: 5,700 years times No. of half lives
At death	100 units	$5,700 \times 0 = 0$
After first half life	50 units	$5,700 \times 1 = 5,700$
After second half life	25 units	$5,700 \times 2 = 11,400$
After third half life	I 2.5 units	$5,700 \times 3 = 17,100$
After fourth half life	6.25 units	$5,700 \times 4 = 22,800$

Table I.

One of the major reasons C-14 dating is given so much attention and acclaim is its complexity. This brief summation is merely an overall picture of the dating process. For this paper it was not deemed necessary to go into the intricacies behind the scientific theory. Unfortunately, those qualified to understand the scientific principles are too often set in their allegience to the theory of evolution and cannot, therefore, observe and evaluate counterproposals objectively. The creationist is then faced with the task of debating something he does not, or maybe cannot, understand, while the evolutionist is comfortably protected by his technical complexities. Even when shorn its complexities, questions concerning certain aspects of C-14 dating, which the evolutionists tend to slide over, can be brought to bear on the validity of the theory as a whole.

First of all, the very basis for C-14 dating depends on being able to deterrine the concentration of C-14 both at the time of the organism's death and in its fossil at the time of testing. Determining the concentration in the present fossil, although not the easiest of tasks, is not absurd in its theory and seems to possess reasonable accuracy; therefore, an objective evaluation cannot find fault with science's claim of knowing the concentration of C-14 in fossils today. But the other end of the clock is quite a dif-

ferent situation. Determining the amount of C-14 in the animal at the time of its death is considerably more difficult.

In arriving at a figure for the initial amount of C-14 in the fossil at its death the scientists assume that at death a bone has the same amount of C-14 in it whether death occurred recently or millions of years ago. They base this on what chemists call a "closed system equilibrium." This necessitates C-14 being formed at the same rate it is being degenerated. If C-14 is being formed and degenerated at the same rate, then the concentration of C-14 at any given time will be constant or the same. If the concentration of C-14 is constant at various points in time, then no matter when the animal died it should contain the same concentration of C-14. With this reasoning evolutionists assume one can consider the original C-14 level as equivalent to the present day concentrations. Therefore, he can use current figures reflecting the radiocarbon content in bones as equal to the C-14 content in the ancient fossils at their death. For this assumption to be valid, however, it must be assumed that the rates of formation and decay are equal. It is this assumption that is in question and will be examined further.

Libby, who did much of the initial research on radiocarbon dating, also found another interesting fact.27 He noticed that the rate of formation seemed to be about 18, while the rate of decay appeared to be about 15. This means that while 18 units of C-14 are being formed, 15 units are degenerating or the total amount of C-14 on the earth is constantly increasing. Chemical reactions, given enough time, tend to go toward an equilibrious concentration. Therefore, because of this tendency, Libby felt his observations must not be a valid indication of the true rates. He felt that due to the tremendous age of the earth it would be virtually impossible for this unbalanced equilibrium to exist. (Here Libby justified his whole premise on the assumption that the earth was tremendously old. Building on such assumptions, it is less than surprising that his end conclusion would reciprocally validate his initial postulate. It is vital to base validity tests on fact-- not assumptions.) However, recent studies have tended to collaborate his initial findings. In fact, there does seem to be a significant difference between the rates of formation and the rates of decay. Now to regress a little and show the importance of this discovery.

The point under consideration is whether evolutionists can validate the assumption that the concentration of C-14 was the

same when ancient fossils died as it is in animals that die today. Evolutionists claim that it is the same and use the modern concentration of C-14 as a basis for their calculations, but is this justifiable if the rates of formation and decay are not equal? To help dispel some of the inevitable confusion at this point and to help answer the question, look at a hypothetical example.

Let us say that the amount of C-14 in the bones of an animal which dies today is 100 units. If the rates of formation and decay are equal, the fossil of an ancient life form would also have contained 100 units when it died. If this same fossil is found, through testing, to have 6 units of C-14 left in it, by comparing the two figures-- 100 and 6-- the age of the fossil would be calculated at four times 5,700 or 22,800 years old (Table I.). But now let us see what happens if the rates are not equal. If the C-14 is formed faster than it degenerates, then the present level of 100 units at the time of death is much higher than it was when these ancient animals died. If, as Libby saw, the rates are 18 and 15 respectively, then, say over a 1000 year period, 18 units would be formed while only 15 units were decaying. This represents a net gain of 3 units of C-14 every 1000 years. Previously the age of the fossil was calculated to be 22,800 years old; but, with varying rates the concentration of C-14 would have increased over this 22,800 year period at the rate of 3 units per 1000 years. Consequently, the present day level would reflect this increase and be 3 times 22 or 66 units higher than when this fossil was supposed to have died, 22,000 years ago.

Correct initial C-14 content = (the projected C-14 level due to modern readings)

— (the increase in C-14 level due to rate differences)

= (100 units)-(66 units)

= 34 units

Upon comparing the observed C-14 level remaining in the fossil, 6 units, with what the actual C-14 concentration would have been 22,000 years ago, 34 units, the age estimation of the fossil drops from 22,800 years to about 13-14,000 years old (Table II.).

Time	Amount of C-14 in the fossil	Age of the fossil: 5,700 years times No. of half lives
At death	34 units	$5,700 \times 0 = 0$
After first half life	17 units	$5,700 \times 1 = 5,700$
After second half life	8.5 units	$5,700 \times 2 = 11,400$
After third half life	4.3 units	$5,700 \times 3 = 17,100$

Table II.

From this table it is seen that if a fossil is examined and found to contain 6 units of C-14, its age is not 22,800 years old-- but rather about half that. The figure of 13-14,000 years old is not necessarily being presented as the actual age of man or the earth-- such a presentation was not the purpose of this illustration. Rather, these figures were used merely to show in a simplified way, the drastic effect and the cuts in age estimations the varying rates can make. (Those who are mathematically oriented will note that the illustration used lacks one factor. When the rates are unequal, one is faced with two unknowns —the age of the fossil and the initial concentration of C-14 in that fossil. To solve for two unknwwns another equation would be needed. This second equation is a very complex calculation which gives the level of C-14 at any given time in an unbalanced situation. Those who pursue the investigation of radiocarbon testing further will find that the addition of this second equation yields the same general conclusion derived in the example just presented. Therefore, it was not deemed needful or profitable to introduce it into this discussion.) Investigations since the time of Libby seem to indicate a greater variation in rates than originally found. Current figures set the rates at 17.7 and 13.6 respectively which would bring about an even sharper decrease in the age estimations.28 Using these rates and the effects they create, the calculations tend to place the fossils found so far at 10,000 years old or less. This is still a little higher than the 5-7,000

year figure set by most Biblical historians; however, it is certainly much closer to the Biblical timetable than the evolutionary scale.

Even with these new facts and corrections figured in, radiocarbon testing cannot be taken as infallable or certain, because considerable data is still coming in. There seems to be some evidence that earlier the earth's atmosphere was somewhat richer in oxygen than it is today and this may have effected the cosmic ray's reaction on the nitrogen molecules as they entered the air. However, further work will have to be done before anything conclusive can be advocated. It will certainly be interesting to see what future developments do to effect the concept and validity of C-14 dating. So far nearly all of the recent advances have shortened the age estimations considerably.

Carbon is not the only radioactive element used in attempting to determine the age of the universe and its components. Other elements such as uranium, thorium, lead, rubidium, potassium, argon and strontium were used in the analysis of the moon samples brought back on the recent space flights. Like C-14 these also depend on the measuring of the decay products and the various rates to calculate how long it would take to achieve the observed ratios. All of these tests are built on the assumption that the amount of decay products present in the beginning can be determined. For instance, uranium decays to lead; therefore, to determine the age of the rock the ratios of uranium and lead are measured. From this ratio the age of the rock is determined. But the evolutionists totally disregard the possibility that some unknown amount of lead may have been present initially and is not the product of uranium decay. This assumption is obviously necessary for the evolutionists to get the ages they need for evolution to take place. But, as seen in the examination of C-14 testing, such assumptions concerning the initial content of radioactive elements can be misleading and not conducive to objective investigations.

There are many types of chemical analysis used by the evolutionists to validate their theory. However, after all the complexities are stripped away, they all seem to be centered basically on the same kind of assumptions. As more data becomes available, these assumptions are often shown to be unfounded. Many of these tests have had to be modified until, as in the case of radiocarbon dating, their age estimations are not a great deal

longer than those of Biblical chronology. Rest assured that evolutionists will present these dating techniques as "proof" for evolution for some time to come. The creationist must, therefore, examine each test and judge for himself its validity and merit.

Populations

One of the most persuasive arguments in favor of the creationist's point view is often overlooked because of its simplicity— the statistical calculation of the earth's population. One fact on which the evolutionists and creationists must agree is the present population of the earth. One should be able to look back into the history of mankind and gain some insight into the rates of growth which have led to the present population. Does our present population reflect the working of millions of years, or can it be explained within the Biblical timetable? The true difference between the population patterns of a million years and a few thousand should be obvious and easily discernable.

Many fail to realize just how fast the earth can populate itself. People often read Biblical accounts of the Old Testament and visualize a small nation of individuals; but, this was certainly not the case. For instance, there were 1656 years between the time of Adam and the time of the flood. During this time the record indicates that the life span was significantly higher than it is today. The average recorded age between Adam and Noah is slightly over 900 years old. Also there is every indication that the families of this time were considerably larger than those of today. With these considerations in mind it appears that an ultraconservative estimate places the population at the time of the flood at about 250 million. This is certainly a conservative figure; more liberal, and probably more accurate calculations, place the population close to one billion. The concensus of these two figures results in a figure between 500-750 million people. Based on this rate it is entirely possible and even probable that cities were formed this early.

"And Cain went out from the presence of the Lord, and dwelt in the land of Nod, on the east of Eden. And Cain knew his wife; and she conceived, and bare Enoch; and he builded a city, and called the name of the city, after the name of this son, Enoch."

Gen. 4:16.17.

It must be remembered, however, that these figures did not

effect the present population of the world. If all but eight people were killed in the flood, then one should start there when examining the recent growth rates. Biblical indications show that the life span was considerably shorter after the flood. But this does not mean that the growth rates could not still move very rapidly. Even with the shorter life span it appears that at least 3 million people were living after only 400 years of multiplication. But for a good indication of the present population rates look at a recent study conducted at Chicago University: It indicated that present populations grow at about a one percent increase each year. At this rate even the 5000 year figure proposed by Biblical historians would have resulted in over population long ago. 29 Certainly the growth rate has not always been this high because of disease, war and other environmental effects, but it serves to point out that population statistics cannot bear the long periods of multiplication the evolutionist must use if this theory of evolution is to be valid.

These figures are not pointed out as an exercise in math, but to show how quickly the population of the world will increase. If man is truly the product of millions of years, the earth would have been faced with over population several million years ago. Even when the average death rates from disease, war and normal aging are taken into account, the present population does not indicate the work of millions of years. Those who study population statistics postulate that the present world population could readily be accounted for within 5,000 years of multiplication—a figure very close to the one given by Biblical scholars for the time from the flood until the present. It is certainly a long way from the postulation of the evolutionits. The earth just could not support the number of individuals the evolutionist's timetable would produce.

SUMMARY

When the religious world was first faced with the advocation of evolution and its various ramifications, it became acutely keyed for rejecting the theory. But as time passed and the issue became more complex and technical, many religious leader left the battle with a feeling of dispair and confusion. The feeling seemed to be to

leave the scientific matters to the scientists who could understand them. Behind this cloud of confusion, dispair and apathy the theory of evolution grew from an outrageous concept to one of almost universal acceptance. Only in the last ten or fifteen years has there appeared a concerted effort which scientifically questions the validity of evolution. With this emergence the issue has become somewhat polarized into two groups of thought: creationists and evolutionists. The issue is not so much an interreligious debate which questions the validity of one religion over another, but rather a unireligious issue which questions even the necessity and validity of any religious concept. From both groups have come claims of conclusive "proof" for their particular belief. Evolutionists claim that science supports their theory while counterclaims by creationists are offered that "true" science actually validates the Biblical account. With such proposals flooding the issue the danger arises that the topic be thrown back into a maze of confused rhetoric.

In hopes of avoiding this it is important to realize that the issue is not whether one is dealing with "true" or "false" science, but whether it is science at all. All science is true, unless "falsely so called"; however, many people are confused because they consider anything spoken by a "scientist" as science. Data becomes science when it is conclusively proven. Utterances are merely theory and opinion until they are support by fact. There was a time when the available data tended to support the theory of evolution, but this is just no longer the case. Ironically, when the data seemed to support evolution, most people rejected it; and now, when data is emerging against evolution, the majority seem eager to accept it.

This paper has attempted, through the usage and examination of the most prominent aspects of the evolutionary concept, to show how the actual data now available gives very little comfort to the evolutionists. But if this be true then why do the various evolutionary findings get so much pubicity? A definite factor in such considerations must be the ever-increasing cost of research. Under our present system the money usually comes from the government or another foundation interested in that particular field of work. Both of these sources can certainly be influenced by the publicity surrounding these events; therefore, any acclaim a

researcher can gain for his project is beneficial to its furtherance. Scientists are not to be condemned for this procedure, but it is worthwhile for the public to bear it in mind. Certainly science is not the only field to use publicity to further its own ends, but readers of these news accounts carrying scientific proceedings will profit from being aware of this fact and making allowances for it in their interpretation of these reportings.

Another common claim of the evolutionist is that the Genesis account of creation requires too much faith. However, he is forgetting that the very concept of science is based on faith-a faith in the logical processes of the human mind which, by the deductions of his theory, is the product of *chance*. The evolutionist wants to bestow the role of creator onto "Time" rather than "God". To believe the Genesis account of creation, even if only accepted as a theory, takes faith in the originator of the story (God) and all the others which have told the story that what they were telling is true. Having faith in evolution requires faith in the men who have conceived it and tried to prove it. By choosing evolution over creation one accepts a relatively new concept-which by its very nature can never be fully verified-for a tried, tested and never-proven-wrong one.

The cause of the upsurge in evolutionary ideas over the last few decades is difficult to identify. Undoubtedly, many factors have contributed to it. For one, there seems to be a significant correlation between the popularity of evolution and our society's increased secularization. The movement has been notorized by man's attempt to master himself and his world through his own powers without the assistance of a higher diety. Secular man either reduces the powers of the universe to his own control or ignores them as irrelevent. This line of reasoning seems to have paved the way for the evolutionists and their belief. Both concepts follow the same general principle. Evolutionists attempt to explain the creation using only human understanding, while ignoring the unexplainable as irrelevant. The evolutionist must attempt to either replace the power of a higher diety with chance or voke them together in an awkward endeavor to reconcile his own lack of faith. Either way the validity of the religious concept is being directly challenged.

It would be unjust to leave the reader with the idea that all, or even most, of the evidences being submitted by science for consideration are anti-evolutionary. There are many areas which still submit new "proots" for evolution, but the number and interest is slowly diminishing as obvious discrepancies come to light. It will be interesting to watch the progress of the battle over the next few years.

It would be foolish to expect that invalidating of the evolutionary concept would automatically lead to an acceptance of Genesis. The religious idea must always be centered around faith which reverts the issue to the individual level. Choosing between evolution and Genesis is an individual responsibility. The aim of this thesis has been to show that such a decision cannot be based on the conclusiveness of evolutionary data. A decision of this nature must be the product of individual thought and reasoning if it is to be valid. Thoughts which are designed merely for the sake of conformity with others are useless and harmful to the truth. When one allows his thoughts to be dominated by conformity, he no longer continues to function as an intelligent or productive individual. Much of evolution's success has been directly due to people's willingness to accept the theory in an attempt to conform to the concepts of the "educated". Although a belief in the Genesis account of creation may contradict the proclaimations and best thinking of many men, it does not, in any way, run contrary to science, the innate powers of the human mind, or the conscience of a God-fearing soul.

J.W上.

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