EVOLUTION EXPOSED! OPPOSING SCIENCE AND SCRIPTURE

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When Charles Darwin published his *Origin of Species* in 1859, he broke the final barrier holding the disciplines of science to the framework of the Bible. The theory of biological evolution originally proposed by Darwin has, in this century, been developed into a theory governing the origins of the universe. Its roots are in three major disciplines of science: biology, geology and astronomy. Evolution theory proposes a universe that either created itself or has eternally existed and that continues to change itself into a more complex system of processes. The physical laws observed in operation today are assumed to have always been in operation. The Laws of Thermodynamics, however, govern all processes that operate in the universe and the Second Law specifically forbids advancement in organization of any natural process. Most importantly, the Bible clearly teaches that God created the universe and all it contains: "By the word of the LORD were the heavens made; and all the host of them by the breath of his mouth."[i] The theory of evolution is diametrically opposed to both the laws of science and the teachings of the Scriptures.

Evolution in Biology

The erosion of the Biblical basis of science paved the way for an acceptance of evolution based theories. New theories being developed in many other disciplines of science, mainly physics, astronomy and particularly geology, had

carved inroads into traditional thinking thus preparing the scientific world for Darwin's theory of evolution.[ii] During the Middle Ages, the Universe was viewed as being centered on man and directed by God. In the 19th Century, Copernicus transformed scientific thinking by proving the earth was not the center of the universe.

> Physical events were governed by natural laws, and although God was still recognized as the author of laws, his personal intervention was no longer required to explain how things were made. The emphasis slowly shifted from the supernatural to the natural. From the miraculous to the mundane. And although the cosmos was still regarded as something which had been created, it was also seen as a developing process subject to scientific laws.[iii]

England's intellectuals, scientists, manufacturers, inventors, etc., soon began to reject the Christian framework of thought that established science had rested on. They thought of nature as a manageable process governed by discoverable laws instead of the supernatural; the theological significance of the natural world was discarded.[iv] This type of thinking proved fertile ground for Darwin's theory of evolution.

Charles Darwin revolutionized scientific thought when he published his *Origin*

of Species, but he did not do so single handedly; the idea of biological descent through modifications in the species, evolution, had been postulated by a number of scientists during the century prior to his work.[v] The French naturalist George Buffon published his book, *Theory of the Earth*, in 1749 in which he rejected the accepted practice of basing natural history on the interpretation of the Scripture.[vi] Almost 30 years later he published another work, *Epochs of Nature*, in which he developed the idea of "gradual change by observable causes"[vii] and tried to determine the chronological order of the appearance of species. Due to the immense popularity of his books throughout Europe, he was an important figure in the promotion of the doctrine of descent with modification.[viii] The doctrine of descent through modification was an affront to the well established idea of the fixity of species. French naturalist and professor of Zoology in Paris, Chevalier de Lamarck, continued the "attacks on the doctrine of fixity of species."[ix] He published his theory in 1801 claiming "it is the habit that has shaped the organism. A duck was not made web-footed to enable it to swim, but it became web-footed because new wants attracted it to the water."[x] Although Lamarck's theories were later rejected, their early influence upon Darwin was never completely reversed.

The man who most influenced Darwin was the great pioneer geologist George Lyell. Lyell built on the earlier ideas of Scottish geologist James Hutton who "maintained that the present is the key to the past and that, given sufficient time,

processes now at work could account for all the geologic features of the Globe."[xi] Lyell published his *Principles of Geology* in 1830. In it he attempted "to provide for geology a comprehensive theory to account for all possible past and present geological changes"[xii] and to show

> that the forces working to transform the surface of the earth in the past were the same as those that could be seen in operation at present, and that these forces were ordinary, regular, orderly, and lawlike. Lyell eschewed the supernatural or spiritual origin of geological processes.[xiii]

Laporte sums us Lyell's influence upon Darwin's theory by stating, "Lyell's geology emphasized the antiquity of the earth, giving the essential element of time so necessary to the Darwinian concept of evolution by small, incremental change."[xiv]

The ideas of modification with descent was firmly in place in the scientific world by the early 1800's but it took Charles Darwin's treatise, *On the Origin of Species,* to fully develop the theory and make it acceptable. "Charles Darwin's quintessential contribution to evolutionary theory, therefore, is not the idea of evolution, but rather his statement of the mechanism by which animal and plant species change into other distinct species."[xv] The views of Darwin's predecessors, although popular during their day, were only theories, not scientific facts. There was no empirical data to substantiate them, yet they were a major influence upon the young Darwin who signed aboard the H.M.S. Beagle in December of 1832 for a five year voyage of research and exploration around the world. During this voyage,

Darwin collected animal and plant specimens and filled notebooks with observations of everything from tropical fauna to geological strata. He would later use these observations to formulate his theory of natural selection.

Darwin did not set out to hypothesize a theory of evolution but rather he "started out to discover the origin of species."[xvi] He soon "became convinced that it was impossible to bound, or discover, the loci of species"[xvii] and unable to find their beginning, he formed "a theory of continual minute variations winnowed by natural selection."[xviii] It has been acknowledged by scientists that Darwin lacked a complete "understanding of the nature of species"[xix] and considered the term *species* "as one arbitrarily given, for the sake of convenience, to a set of individuals closely resembling each other."[xx] Today the origin of species still remains "one of the cardinal problems in the field of evolution."[xxi] The correct definition of a species will be a major step toward solving this problem.

The species is considered "the cardinal unit in the process of evolution"[xxii] and must be correctly defined to understand evolution. Unlike Darwin, evolutionists today realize that a species is "not just a matter of judgement but has a quite definite objective reality; it is a category which is not simply a convenience in classification."[xxiii] Geneticist and leading neo-Darwinian Theodosius Dobzhansky defined a species as being a group of individuals who shared a common gene pool of hereditary traits, produced fertile offspring when crossed with each other and

most importantly, are separated and protected from other species by a reproductive gap.[xxiv] The reproductive gap constraint is echoed by taxonomist and foremost evolutionist Ernest Mayr as he claims "species [biological] are groups of interbreeding natural populations that are reproductively isolated from other such groups."[xxv] The reproductive gap between species limits the number of variations that can result in a cross. Limited variation coupled with a common gene pool suggest stability in the species. Every member of a species shares certain common traits with all other members of the species which uniquely identifies the species. Variations within individual members of the species will not change these common traits.

How do the evolutionists' definition of a species compare to the Genesis kinds of Scripture? Dr. Henry Morris, leading creationist author and teacher, says

> It is significant that the phrase "after his kind" occurs ten times in the first chapter of Genesis. Whatever precisely is meant by the term "kind" (Hebrew *min*), it does indicate the limitations of variation. Each organism was to reproduce after its own kind, not after some other kind.[xxvi]

Dr. Frank L. Marsh, biologist and foremost creationist, believes "if organisms cross they are members of a single Genesis kind, I looked for a name for the created unit"[xxvii] and "finally I suggested (1941) the name *baramin* from the Hebrew roots, *bara*, created, and *min*, kind."[xxviii] A true cross produces hybrid offspring: offspring are hybrid when they inherit traits from both parents. This is an important

requirement because offspring may be produced which takes all their hereditary traits from the female's side. These are not true hybrids and hence not true crosses between Genesis kinds.[xxix] The baramin must be able to cross and produce hybrid, fertile offspring.

The biological species definition brings evolutionist thinking closer to the idea of the Genesis kind. However, the reproductive-only constraint can be used to name new species of individuals that morphologically are the same. The classic example involves Dobzhansky's work with the vinegar fly. He crossed two races which produced semi-sterile daughters and completely sterile sons. Based on the biological definition of a species, the vinegar fly's offspring were a new species since the sterile sons exhibited a "reproductive gap". Thus, the experiment is considered a proof of evolution.[xxx] Marsh observes that "although these groups are practically indistinguishable morphologically, they behave as good species biologically."[xxxi]

How do the biological species and the baramin relate to each other? Dr. Marsh sums up the differences nicely as follows: "The biological species to the evolutionist is first and last physiological, while the created kind of the creationist is commonly first morphological but lastly and more decisively physiological."[xxxii] The physiological species is synonymous with the biological species definition and consists of individuals which can cross and produce fertile offspring while the morphological species is based entirely on form, structure and coloration without

regard to crossability. According to Dr. Marsh, the difference between the baramin and the biological species is the morphological constraint. Evolutionists consider morphological changes as variations of the species while creationists think of them as natural attributes of the species. Since variations are a necessary ingredient for evolution, understanding the role of the morphological changes is imperative.

Darwin's treatise on the origin of species by natural selection, the theory of evolution, presents the idea of variations between individuals of a species as giving rise to a new and advanced species over time. This process of new species arising from previously existing ones is called speciation. Darwin based his theory on the assumption that variations would easily arise among individuals of a species. This view is confirmed by Mayr who declared speciation was based "on the assumption that through the gradual accumulation of mutational steps a threshold is finally crossed which signifies the evolution of a new species."[xxxiii] Even geographic speciation, which "is characterized by the gradual building up of biological isolating mechanisms"[xxxiv] is said to have as a secondary factor "the gradual accumulation of genetic differences."[xxxv] In order for the species to advance, at least some of the variations must be good for the individual member of the species. Thus, freely occurring variations that increase the organizational complexity of the species are a primary assumption of the theory of evolution.

Dobzhansky states "the ultimate source of organic diversity is mutation."[xxxvi]

A mutation is a change in the structure of a DNA molecule, a gene, in the reproductive cells of the individual. Dobzhansky calls mutations "the building blocks, the raw materials,"[xxxvii] of evolutionary changes. To him mutations were "the ultimate source of evolution."[xxxviii] The evolution model depends on some natural mechanism to produce upward progress in complexity and the mutation is that mechanism.[xxxix] If mutations are really the "building blocks" of evolution they would be expected to be primarily beneficial and able to produce an upward or vertical change toward a higher degree of order. Observations of the natural world, however, do not bear out this theory.

Biological systems preserve their identity from generation to generation through the operation of the laws of inheritance. Much has been learned about heredity through observation of living systems. Gregor Mendel, the Austrian monk and horticulturalist, did many experiments with peas in the later half of the 1800's that determined the basic laws of inheritance. Through experimentation, he determined there was a clear distinction between the appearance of an individual (its phenotype) and its genetic composition (its genotype). He also revealed that inherited qualities are not a blend of those of the parents' genetic traits. Instead, genetic traits are paired as dominant and recessive. Only the dominant traits will be manifest in the offspring's phenotype. The recessive traits, however, are retained in the offspring's genotype and can be passed on to their future offspring.[xl] Mendel's

Theory of Particulate Inheritance states that the qualities in the offspring is the result of some "factor" in the parents. These "factors" are now known as genes.[xli]

Mendel's Laws of Inheritance insure conservation of variations. Even Dobzhansky admits that "heredity is a conservative force: the genes function as templates for the production of their exact copies; by making the offspring resemble their parents, heredity confers stability upon biological systems.[xlii] As shown already, "mutations are caused by alterations within genetic materials."[xliii] An alteration would deviate from the exact copies that the laws of inheritance enforce, therefore a mutation only occurs in opposition to a well established law of science. From the Genesis account of creation, conclusions can be drawn supporting a divine institution of these laws of inheritance. As stated earlier the phrase "after his kind" occurs ten times in Genesis chapter one. Dr. Morris summarizes by saying the "DNA molecule and the genetic code contained in it has reinforced the Biblical teaching of the stability of kinds."[xliv]

The net effect of all mutations is harmful because they counteract the stabilizing effect of the laws of inheritance. The laws of inheritance act to preserve the genetic code from one generation to the next. Any mechanism, whether natural or artificial, that distorts this genetic code is harmful to the individual and to the species. Dobzhansky says "mutations are accidents, because the transmission of hereditary information normally involves precise copying. A mutant gene is, then, an

imperfect copy of the ancestral gene."[xlv] Dobzhansky admits that "mutations alone, uncontrolled by natural selection, would result in the breakdown and eventual extinction of life."[xlvi]

Mutations are the key ingredient in evolutionary thought because they provide a means to attain the variations necessary for species to make vertical progress in organization. While readily admitting the harmfulness of mutations, evolutionists still believe Darwin's theory of natural selection will advance a species, via mutations, rather than degenerate it.

To evolutionists, mutations are the engine of evolution and natural selection is the steering wheel. Darwin developed the theory of Natural Selection in the years following his stint aboard the H.M.S. Beagle. In defining it he says, "this preservation of favorable individual differences and variations, and the destruction of those which are injurious, I have called Natural Selection, or the Survival of the Fittest."[xlvii] Darwin contends that

> The ultimate result is that each creature tends to become more and more improved in relation to its conditions. This improvement inevitably leads to the gradual advancement of the organisation of the greater number of living beings throughout the world.[xlviii]

The theory of natural selection rests on the basic assumption of a struggle for existence between living things. Darwin developed this integral part of the theory after reading a treatise on population growth by the English economist Thomas

Malthus. Malthus believed population increased faster than food supplies thus producing a struggle for the food supplies among living things.[xlix] The struggle for existence ensures only a limited number of living things survive. Natural selection acts as a sieve through which all mutations must pass and only those that promote the upward progress of the individual are allowed to filter through. The ability to adapt to a changing environment and obtain necessary food is the filtering-factor. Those individuals which adapt survive and pass their newly acquired traits on to their offspring while those individuals which are unable to adapt die and produce no offspring. Only the most fit survive thus guaranteeing vertical progress in organization. Evolutionists do not all agree on the ability of natural selection to direct progress. Even Darwin's most staunch supporter, Sir Julian Huxley, believed that "natural selection does not guarantee progress."[l] Going even farther in his critique of natural selection, modern day evolutionist J.B.S. Haldane declares that "most evolutionary change has been degenerate."[li]

Darwin's theory of natural selection contradicts clearly established scientific laws. To re-emphasize, Darwin believed the ultimate result of natural selection was an improvement of the individual and an overall advancement of the species.[lii] This implies that evolution requires an advancement of order. Many biologists believe in this "inherent tendency towards higher organization,"[liii] but advancement in order is just the opposite from what is observed in the natural world. The two basic laws of

science, the First and Second Laws of Thermodynamics, describe all processes which occur in the universe. These laws are experimentally tested and proven and are not based on speculation.

> The Second Law (Law of Energy Decay) states that every system left to its own devices always tends to move from order to disorder, its energy tending to be transformed into lower levels of availability, finally reaching the state of complete randomness and unavailability for further work.[liv]

With the Second Law as the governing agent, two criteria must be met for a change from disorder to order to occur: 1) there must be a pattern, blueprint or code to direct the growth and, 2) there must be a power converter to energize the growth.[lv] "Natural selection is not a code which directs the production of anything new; it serves merely as a screen which sifts out unfit variants and defective mutants. It certainly is not an energy conversion device."[lvi] To propose a theory of naturally occurring advancement in organization in a universe governed by a law of naturally occurring disorder is a serious flaw in logic. The laws of science preclude natural selection, as defined by Darwin, from ever having occurred.

Not only is Darwin's theory of evolution scientifically incorrect, but more importantly, it is opposed to the teachings of the Scriptures. Evolution teaches living things came into being via naturally occurring processes. The Bible teaches the earth and all living things were created supernaturally by God.[lvii] Genesis 1:1 is the foundation for the entire Bible: "In the beginning God created the heaven and the

earth." The existence of God is never proved in the Scriptures.[lviii] God simply says "I AM THAT I AM."[lix] The Psalmist later reflects that only a fool could say "there is no God."[lx] The name of God used in this verse is the Hebrew *Elohim*; it is the name of God the Creator and is uni-plural suggesting the Godhead. The word "created" (Hebrew, *bara*) means to "call into existence that which had no existence."[lxi] The writer of Hebrews beautifully declares that "the worlds were framed by the word of God, so that things which are seen were not made of things which do appear."[lxii] Evolution depicts man as a conqueror having won out in the struggle for existence. The Bible teaches man was created in the image of God Himself: "God created man in his own image, in the image of God created he him; male and female created he them."[lxiii] Evolution teaches death is just part of the struggle for existence, but the Bible plainly shows death was not part of the original creation; there was no death until Adam sinned.[lxiv] Death was the penalty God placed on Adam for his disobedience.[lxv]

Evolution in Geology

Darwin pointed to the fossil record as evidencing his theory of natural selection. In his *Origin of Species*, he states "if my theory be true, numberless intermediat varieties, linking closely together all the species of the same group, must assuredly have existed"[lxvi] and that the "evidence of their former existence could be found only amongst fossil remains."[lxvii] David Clark, evolutionist writer, explains that "in 1859, Darwin published his theory of organic evolution and it was recognized that fossils were the primary evidence for this theory."[lxviii] Darwin pushed aside the long

accepted view that the fossil record was produced by the Genesis flood of Noah's day. The Bible based explanation for fossils "limited the explanation for their existence to a single catastrophic event in history."[lxix] Darwin, however, had completely embraced Lyell's uniformitarian view of the earth's past which left no room for geologic catastrophes.

George Lyell's theory of uniformitarianism presents the idea that the earth's processes have always operated at a constant or uniform rate. Lyell built his theory of uniformitarianism on the work of Scottish geologist James Hutton. Dr. Morris, in quoting Carl Dunbar's standard textbook on geology, *Historical Geology*, explains Hutton's views:

> The uprooting of such fantastic beliefs [that is, those of the catastrophists] began with the Scottish geologist, James Hutton, whose *Theory of the Earth*, published in 1785, maintained that *the present is the key to the past,* and that, given sufficient time, processes now at work could account for all the geologic features of the Globe. This philosophy, which came to be known as the *doctrine of uniformitarianism* demands an immensity of time; it has now gained universal acceptance among intelligent and informed people.[lxx]

Until Hutton's time, geology had been based on a catastrophic framework. The Biblical flood of Noah was accepted as true and the features of the earth's surface were attributed to the actions of the great flood. Lyell's firm view of uniform process rates precluded any geological formations resulting from catastrophic processes. He rejected completely the Biblical account of the flood:

> Never was there a dogma more calculated to foster indolence, and to blunt the keen edge of curiosity, than this assumption of the discordance between the ancient and existing causes of change. It produced a state of mind unfavorable in the highest degree to the candid reception of the evidence of those minute but incessant

> alterations which every part of the earth's surface is undergoing, and by which the condition of its living inhabitants is continually made to vary. For this reason all theories are rejected which involve the assumption of sudden and violent catastrophes and revolutions of the whole earth, and its inhabitants.[lxxi]

Lyell attributed the features of the earth to the "minute but incessant alterations"[lxxii] that it has undergone instead of to a single catastrophe such as the Genesis flood.

The theory of uniformitarianism is an antipodal view of the earth's processes as described by the Second Law of Thermodynamics. The laws of thermodynamics have been experimentally proven true but there are "no scientific basis for assuming such uniformity of process rates."[lxxiii] Some evolutionists even realize the problem with uniformitarianism as Dr. Stephen Jay Gould, influential paleontologist, admits "substantive uniformitarianism (a testable theory of geologic change postulating uniformity of rates or material conditions) is false and stifling to hypothesis formation."[lxxiv] Dr. Harold Slusher, creationist research scientist, gives insight to the false assumption underlying uniformitarianism:

> The second law of thermodynamics says that all natural processes are deteriorative or degenerative. Natural processes are changing the universe in a way similar to the unwinding of a clock spring that loses organization by the ticking of the clock . . . It is not possible to work backwards in a situation where there is a disordering effect continually taking place and arrive at a unique description of past conditions. The scientific method is not applicable when working back into the past where there were no observations.[lxxv]

Uniform process rates cannot exist in a universe where all natural processes degenerate. Dr. Slusher goes on to completely invalidate uniformitarianism by declaring:

> Many data around the earth indicate that the rates of the processes operating in the past have been radically different from those of the

> present. . . 'The present is the key to the past' statement, if referring to rates of activity, certainly has no scientific foundation.[lxxvi]

The present can never accurately describe the past due to the disordering effect of the Second Law of Thermodynamics.

The theory of uniformitarianism rests on an old age for the earth. Lyell acknowledged with the earlier geologists of his day that the short age of the earth could not have produced the current surface of the earth by gradual change; this led him to conclude the earth was extremely old.[lxxvii] Dr. Duane T. Gish, noted creationist scientist, gives insight into Lyell's reasoning explaining that many millions of years would be required to form the thick sediment deposits, hundreds of feet thick, that dot the earths' surface hence, "the age of the earth as estimated by evolutionary geologists began to increase at an astounding rate."[lxxviii] The extreme age of the earth postulated by Lyell's theory was necessary for Darwin's theory of evolution to be valid. Darwin admitted this dependency in his *Origin of Species* when he stated anyone who read Lyell's *Principles of Geology* and "does not admit how vast have been the past periods of time, may at once close this volume."[lxxix] Darwin's evolution is based on Lyell's uniformitarianism which, in turn, depends on a great age of the earth.

Since an old age for the earth is a direct prediction of uniformitarianism, empirically determining the age of the earth would be an authoritative test of validity. Men have always known the inner earth was hot. Moses declared that the Lord had "set on fire the foundations of the mountains."[lxxx] Scientists of the later century determined the age of the earth by determining the earth's cooling rate, estimating

its initial and current temperature and calculating how long it would have taken to cool to the current temperature. William Thomson, more commonly known as Lord Kelvin (for whom the Kelvin temperature scale is named), used this method in his studies of the earth. Dr. Slusher relates that shortly after the theory of uniformitarianism was published, Kelvin accused

> the uniformitarians of having ignored the established laws of physics and as a result brought great mistakes into the ranks of geology. Kelvin supported his arguments by the thermodynamic laws . . . and the age of the earth based on its cooling.[lxxxi]

Dr. Slusher states "The cooling times [of the earth's interior] appear quite small (thousands of years) if the initial temperature of the earth was on the order of that for a habitable planet for any of the models."[lxxxii] As a worst case scenario, Dr. Slusher uses the evolutionists model of an originally molten earth and still disproves uniformitarianism by showing "the cooling times are vastly less than evolutionist estimates."[lxxxiii] Dr. Slusher concludes by saying, "It would seem that the earth is vastly younger than the "old" earth demanded by the evolutionists."[lxxxiv]

In this century, scientists have developed an alternate method of determining the age of the earth called radiometric dating. This method, developed by evolutionists, is used to date rocks and from them the age of the earth is determined. The basis of radiometric dating, as described by staunch evolutionist George Gaylord Simpson, is radioactive decay of isotopes of elements (called parent elements) into another element (called daughter elements). The rate of decay is expressed in a time unit known as the half-life. It is the time it takes one-half of the parent element to decay into the daughter element.[lxxxv] There is a uniformitarian based assumption, however, that the decay rates are constant.

Simpson stress "there is no reason to believe that these rates have changed in the course of geologic time."[lxxxvi] Only rocks containing the radioactive isotopes used in the dating process can be dated. The current amounts of the parent and daughter elements is measured, but the initial amounts are assumed. The current rate of decay is used to calculate how long it would have taken the initial estimated amounts of the parent and daughter elements to decay into the current amounts. Using these methods, geologists estimate the earth to be abut 4.5 billion years old.[lxxxvii]

Dr. Slusher, in his critique of radiometric dating, cautions that the method is based on "questionable" assumptions, the majority of which involve the beginning amounts of the parent and daughter elements.[lxxxviii] Dr. Gish stresses these assumptions are unverifiable and contain inherent "factors that assure that the ages so derived, whether accurate or not, will always range in the millions to billions of years."[lxxxix] The other assumption is that the decay rates have remained steady. Recent research on rates of atomic processes has show this assumption may be false.

For sixteen years, Dr. Thomas Van Flandern of the U.S. Naval Observatory measured the atomic clock against the time it took the moon to complete an orbit of the earth. Astronomers call time kept by the heavenly bodies dynamic time. Dr. Van Flandern's results show that the atomic clock has slowed when compared to the dynamical standard. The atomic clock uses the radioactive decay of Caesium to measure time.[xc] The slowing of the atomic clock is only a symptom of a root cause. The important issue is that all atomic process rates are slowing down. This is

another example of the Second Law of Thermodynamics at work. Creationist researchers Trevor Norman and Barry Setterfield have written a technical paper on atomic process rates. They ascertain that "all forms of dating by the atomic clock are subject to the effect. This includes radiometric dating."[xci] Radiometric dating is an unreliable indicator of the age of the earth because it is based on a uniformitarian concept of atomic process rates which is contrary to the Second Law of Thermodynamics.

Uniformitarianism provided the time necessary for the theory of evolution to be plausible. With these two theories in place, the fossil record could be used as proof of evolution. Simpson reflects that the establishment of paleontology, the study of fossils, hinged upon the recognition that fossil rocks were deposited in an ordered sequence and that this sequence displayed a change in the organisms in the fossil record.[xcii] This vein of thinking quickly led the 19th century geologists to formulate the idea of the geologic column. Since then, the geologic column has joined with uniformitarianism in supporting the theory of evolution.

As defined by evolutionists, the geologic column is the arrangement of rock strata, according to the sequence of the fossils they contain, from invertebrates, to fish, amphibians, reptiles and finally mammals and representing the whole of geologic time.[xciii] Lyell originally introduced this idea "that the successive groups of sedimentary strata found in the earth's crust are . . . distinguishable from each other by their organic remains."[xciv] Each rock strata has a different name and corresponds to a certain period in geologic time. Using the principle of superposition, which says lower strata levels are older than surface strata levels,[xcv] the geologic column is

considered "the main proof of evolution."[xcvi]

Far from being a generally occurring natural phenomena, the geologic column is an artificial sequence of fossil deposits, designed to promote evolution, imposed on the earth's rock strata. Although a prime teaching tool for evolutionists, the geologic column is an idea only; it exists nowhere in nature.[xcvii] The Grand Canyon is the best example of consecutive layers of exposed strata, yet it does not represent the whole geologic column. Rather, the geologic column has been pieced together from partially observed sequences.[xcviii] Creationists Richard Bliss, Gary Parker and Duane Gish have done much work in the realm of fossils. They show that "all real rock layers include gaps and even reversals from this perfect sequence."[xcix] Lyell even admitted "that great violations of continuity in the chronological series of fossiliferous rocks will always exist."[c] Darwin used the gaps in the fossil record to account for the missing transitional forms that his theory of evolution predicted, but were not observed in nature:

> But just in proportion as this process of extermination has acted on an enormous scale, so must the number of intermediate varieties, which have formerly existed, be truly enormous. Why then is not every geological formation and every striation full of such intermediate links? . . . The explanation lies, as I believe, in the extreme imperfections of the geologic record.[ci]

The geologic column, as defined by evolutionists, is not a natural phenomenon and hence can not be used as proof for the theory of evolution since all scientific proof must rest on experimentally tested evidence.

Although the geologic column is an artificial construction formulated by evolutionists, the fossil bearing sediment layers is a true geological observation.

Bliss, Parker and Gish, however, believe "it is an important idea, because it does show a trend for rock layers or strata to be found in a vertical sequence."[cii] How can they be explained outside the context of evolution? Dr. Morris reasons that

> If evolutionary uniformitarianism is invalid as a framework for historical geology, there must be a better framework. If the orthodox Geological Time Scale is really based on circular reasoning and the assumption of evolution, then there must be a better explanation for the sedimentary rocks and their fossil sequences. The Biblical record of primeval earth history does, indeed, provide a far more effective model for correlating all the real data of geology, and the main key is the flood in the days of Noah, described in detail in Genesis chapters 6 through 9.[ciii]

Could the Genesis flood have produced the results seen today in the geologic column? Based on observation alone, the geologic column is the arrangement of rock strata as identified by their fossil contents. Hence, the origin of the fossils determines the origin of the geologic column. Simpson says, "the word fossil, which originally meant anything dug up, has come to mean just the remains and traces of ancient organisms viewed as records of the history of life."[civ] Note the phrase "viewed as records of the history of life" assumes evolution to be true! Bliss, Parker and Gish give a more objective definition of a fossil as "the remains or traces of plants and animals preserved in rock deposits."[cv] Fossils must be formed by a rapid burial process otherwise they would quickly decay upon death. Heavy loads of water-borne sediments, such as accompanies a flood, are good candidates for the rapid burial process.[cvi] Dr. Gish concludes "the fossil record, rather than being a record of transformations, is a record of mass destruction, death, and burial by water and its contained sediments."[cvii]

The sequence of the fossil containing rock strata, the geologic column, is

foundational to both Lyell's uniformitarianism and Darwin's evolution. Although evolutionists claim it demonstrates organic evolution, a careful examination reveals it to be fragmentary, non-existent as a whole entity and often randomly ordered.[cviii] Whitcomb and Morris declare these observations deal a death blow to the theory of uniformity, but are "just what one would expect in the light of the Biblical record!"[cix] In the tremendous movements of water that would occur as the flood waters abated, sediments would be expected to be deposited depending on the landscape and water current flow.[cx] A general pattern may be observed, but it would not be the same worldwide. This is exactly what is observed. The geologic column is a general pattern, but not an observed certainty, of the earth's strata deposits. The theories of uniformitarianism and evolution are based on the ordering of the geologic column. If the ordering is not constant in all observations, the theories fail. Contrastingly, layered rock strata is one of several predicted outcomes of the flood. Since the reality of the flood does not rest on this ordering, observations indicating other order sequences do not affect the reality of the flood.

Lyell's theory of uniformitarianism, based on Hutton's idea that the present is the key to the past, revolutionized geology and provided the foundation for Darwin's forthcoming theory of evolution. Together these theories seemed to disprove the basic Bible doctrines of Creation and the judgement of Noah's flood. In actuality, they serve as examples of the surety of God's Word because they fulfill the prophecy of the Apostle Peter.[cxi] Peter prophesied of the last days when the world would be taken with these doctrines:

Knowing this first, that there shall come in the last days scoffers,

> walking after their own lusts, and saying, Where is the promise of his coming? For since the fathers fell asleep, *all things continue as they were from the beginning of the creation*. [uniformitarianism] For this they willingly are ignorant of, that *by the word of God the heavens were of old*, [creation] and the earth standing out of the water and in the water: Whereby *the world that then was, being overflowed with water, perished.* [flood][cxii]

Evolution in Astronomy

An evolutionary view of the origin of life on earth invariably led to an evolutionary view of the earth itself and eventually to the entire universe. Although biological evolution has never been proven, cosmology, the science of the origin of the universe, has grown tremendously in this century. George Gamow, professor of theoretical physics, insists

> we must reject the idea of a permanent unchangeable universe and must assume that the basic features which characterize the universe as we know it today are the direct result of some evolutionary development which must have begun a few billion years ago."[cxiii]

Cosmologists describe the universe as constantly developing and their model of origins "presupposes that the universe can be completely explained . . . in terms of natural laws and processes . . . without need of external preternatural intervention."[cxiv] The two main cosmological theories of the origin of the universe are the Big Bang and Steady State theories. Both these theories contradict the laws of thermodynamics and defy the Biblical account of the origin of the universe.

The Big Bang theory assumes an expanding universe. In the early 1900's, astronomers discovered that the spectral lines of distant spiral nebulae and galaxies were shifted toward the red end of the spectrum. This shift toward the red is called the Doppler shift or Doppler effect and usually indicates the object is moving away

from the observer.[cxv] It is comparable to the dying wail of a train whistle as the train moves away from the station. The sound waves emitted from the train whistle are being shifted toward the longer wavelengths as the train moves, thus producing the wail. Similarly, light waves are shifted toward longer wavelengths as the galaxy moves, thus producing the color of red. Based on observed Doppler shifts of distant nebulae and galaxies, astronomers concluded these objects were moving away from the earth. It was soon accepted that "the entire space of the universe, populated by billions of galaxies, is in a state of rapid expansion, with all its members flying away from one another at high speeds."[cxvi] The Big Bang theory was developed to explain this expansion of the universe.

> In general, evolutionist astronomers propose that the origin of the universe resulted from an explosion (the Big Bang) which formed a state of chaos. Evolutionary processes then began to act, supposedly bringing about a progression from disorder to order, or from chaos to a highly ordered, complex universe.[cxvii]

The Big Bang theory is scientifically unsound because it contradicts an established law of science and it is based on an assumption concerning the nature of light. First, it contradicts the Second Law of Thermodynamics. "The Second Law of Thermodynamics argues that as a result of the explosion the entropy would increase and there should be no ordered systems formed."[cxviii] Also, the speed of light is assumed to have always been the same throughout time past. This is a uniformitarian view of the universe as a whole. Interpreting the Red Shift of distant galaxies as movement away from the observer is only valid if the speed of light has remained constant. As discussed earlier, Dr. Van Flandern has shown

experimentally that the atomic clock has slowed compared to dynamical time. Norman and Setterfield draw the astounding conclusion that

> If atomic time is drifting against the dynamical standard, then other atomic quantities measured in dynamical time should also show the effect. . . One of the prime candidates is the speed of light. All light comes from atomic processes . . . If atomic processes were faster in the past, the speed of light would have been faster.[cxix]

If the speed of light, denoted by *C*, is actually decaying over time, then all of modern cosmology rests on a false assumption. Norman and Setterfield describe the result on cosmological thought

> The reason for believing that the universe is expanding actually turns out to be evidence for a decay in the speed of light! As *C* decays, a red shift will consequently occur in light from distant objects. The further away those objects are, the more *C* has decayed and the greater will be the resultant red-shift. Far from indicating an expanding universe, the red-shift gives evidence for slowing *C* and atomic processes.[cxx]

Like the Big Bang theory, the Steady State theory, first proposed by Herman Bondi, Thomas Gold, and Fred Hoyle, presupposes an expanding universe and universal uniformitarianism. Their cosmological model says

> Not only does the universe appear the same from any vantage point, it appears the same at all times - past, present, and future. The motion of the expansion of the universe is retained, but as galaxies move apart matter is spontaneously created to fill the void.[cxxi]

Gamow says that "while this point of view provides for the origin and evolution of individual galaxies, it considers the universe itself as being eternal, though with a constantly changing galactic population."[cxxii] There is no scientific evidence for this theory. As the Big Bang theory contradicts the Second Law of Thermodynamics, the Steady State theory contradicts the First. Dr. Slusher explains "this whole

concept is a violation of the First Law of Thermodynamics. This law says that the total amount of energy and the total amount of matter in the universe is a constant. It would forbid the creation of energy out of nothing."[cxxiii]

British biologist and lifetime defender of Darwin, Sir Julian Huxley defined evolution as "a single process of self-transformation."[cxxiv] Since natural transformations require energy, the laws that govern energy transformations, the laws of thermodynamics, must also govern evolution.[cxxv] These scientifically proven laws have profound implications concerning origins.

> The First Law (Law of Energy Conservation) states that nothing is now being "created" or destroyed. It therefore teaches quite conclusively that the universe did not create itself . . . The Second Law (Law of Energy Decay) states that every system left to its own devices always tends to move from order to disorder, its energy tending to be transformed into lower levels of availability, finally reaching the state of complete randomness and unavailability for further work.[cxxvi]

This final state of the universe is called a "heat death." Since the universe is not dead yet, it is not eternal; it had a beginning.[cxxvii] Dr. Morris concludes "The Second Law requires the universe to have had a beginning; the First Law precludes its having begun itself. The only possible reconciliation of this problem is that the universe was created by a Cause transcendent to itself."[cxxviii]

The creationist's position is that God created the universe *ex nihilo* (from nothing). This stand is based on the authority of the Scriptures, not the facts of science. As previously stated, Genesis 1:1 is the foundational verse of the Bible. It is also the foundation of science. What did God call into existence that had not existed before? The universe! The physical universe is composed of three

dimensions: space, mass, time. This phrase is popularly shortened to space-time. The word "heaven" (Hebrew *shamayim*) has an essential meaning of "our modern term space, such as when we speak of the universe as a universe of space and time."[cxxix] Also, "in like manner the term "earth" refers to the component of matter in the universe."[cxxx] Finally, this verse speaks of the creation of time since all this occurs "in the beginning."[cxxxi] God is eternal and is outside of time. Viewed in this way, God called the space-mass-time universe into existence in Genesis 1:1. The universe is not eternal; it had a beginning. Nor did it begin itself. God created it "by the word of his power."[cxxxii]

The laws of thermodynamics, which govern all processes in the universe, forbid evolution from ever occurring. Although these two laws have been experimentally tested and formulated, the purpose behind them can only be found in God's word. The First Law says nothing can be created or destroyed. The reason no energy can now be created is because the Creator "ended His work which He had made."[cxxxiii] Also, the reason no energy can be destroyed is because the Lord Jesus is presently "upholding all things by the word of His power."[cxxxiv] The Second Law says all processes move from order to disorder. It is a law of universal decay. When God finished His creation, He pronounced it "very good."[cxxxv] The laws of conservation were built into the original created universe, but the law of decay could not have been part of an original good creation. As the First Law provided for the conservation of energy, the Second Law provided for the conservation of entropy. Now, however, the Second Law shows entropy is constantly increasing. Something happened after the original creation to cause this change. "The Biblical answer is

Man's sin and God's curse."[cxxxvi] When Adam choose to disobey God, he brought death into the world. The curse God placed upon Adam and Eve in Genesis chapter three is the Second Law as it is known today. "Man had brought spiritual disorder into his own dominion; God appropriately imposed a principle of physical disorder on that dominion as befitting its spiritual condition."[cxxxvii]

Both the Scriptures and science point to God as the Creator of all things. The theories of evolution and uniformitarianism, as formulated by Darwin and Lyell, have no scientific basis and blatantly defy the teachings of the Bible. Those who hold to these theories do so out of rebellion against God instead of any superior scientific reasoning. God describes them perfectly in His word:

> For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse: Because that, when they knew God, they glorified him not as God, neither were thankful; but became vain in their imaginations, and their foolish heart was darkened. Professing themselves to be wise, they became fools.[cxxxviii]

NOTES

[i] Psalm 33:6

[ii] Jonathan Miller, Darwin for Beginners (New York: Pantheon Books, 1982), 26.

[iii] Ibid., 27.

[iv] Ibid., 49.

[v] Benjamin Farrington, What Darwin Really Said (London: Macdonald, 1966), 62.

[vi] Ibid., 63.

[vii] Ibid., 63.

[viii] Ibid., 63.

[ix] Ibid., 63.

[x] Frederick Wollaston Hutton, Darwinism and Lamarckism (New York: G.P. Putnam's Sons, 1899), 38-39.

[xi] Henry M. Morris, Scientific Creationism 2nd ed. (El Cajon, California: Master Books, 1985), 92.

[xii] Barry G. Gale, Evolution Without Evidence (Albuquerque: University of New Mexico Press, 1982), 38.

[xiii] Ibid., 38-39.

[xiv] Leo F. Laporte, Evolution and the Fossil Record (San Francisco: Wilt Freeman and Company, 1978), 4.

[xv] Ibid., 5.

[xvi] Frank L. Marsh, Variation and Fixity in Nature (Mountain View, California: Pacific Press Publishing Assoc., 1976), 19.

[xvii] Ibid., 20.

[xviii] Ibid.

[xix] Ibid.

[xx] Ibid.

[xxi] Ernst Mayr, Systematics and the Origin of Species (New York: Columbia University Press, 1942), 147.

[xxii] Ibid.

[xxiii] Alister Hardy, Darwin and the Spirit of Man (London: Collins, 1984), 83.

[xxiv] Marsh, 26.

[xxv] Ibid.

[xxvi] Henry M. Morris, The Genesis Record (Grand Rapids: Baker Book House, 1976), 63.

[xxvii] Marsh, 36.

[xxviii] Ibid.

[xxix] Marsh, 37.

[xxx] Ibid., 32.

[xxxi] Ibid.

[xxxii] Marsh, 33.

[xxxiii] Mayr, 67.

[xxxiv] Ibid, 187.

[xxxv] Ibid.

[xxxvi] Theodosius Dobzhansky, Genetics of the Evolutionary Procsess (New York: Columbia University Press, 1970), 41.

[xxxvii] Ibid., 65.

[xxxviii] Ibid.

[xxxix] Morris, Scientific Creationism, 54.

[xl] Farrington, 68.

[xli] Ibid., 69.

[xlii] Dobzhansky, 30.

[xliii] Ibid., 43-44.

[xliv] Morris, The Genesis Record, 63.

[xlv] Dobzhansky, 92.

[xlvi] Ibid., 65.

[xlvii] Charles Darwin, The Origin of Species 6th ed. (London: Watts & Co., 1929), 59.

[xlviii] Ibid., 92.

[xlix] Miller, 112-114.

[l] Farrington, 72.

[li] Ibid.

[lii] Darwin, 92.

[liii] Hutton, 67.

[liv] Morris, Scientific Creationism, 25.

[lv] Ibid, 43-44.

[lvi] Ibid., 45.

[lvii] Ex. 20:11

[lviii] Morris, The Genesis Record, 38.

[lix] Ex. 3:14

[lx] Psalm 14:1

[lxi] Morris, The Genesis Record, 40.

[lxii] Heb. 11:3

[lxiii] Gen. 1:27

[lxiv] Rom. 5:12

[lxv] Gen. 3:19

[lxvi] Darwin, 131.

[lxvii] Ibid.

[lxviii] David L Clark, Fossils, Paleontology, and Evolution 2nd ed. (Dubuque, Iowa: Wm. C. Brown Company Publishers, 1976), 5.

[lxix] Ibid., 4.

[lxx] Henry M. Morris, The Biblical Basis for Modern Science (Grand Rapids: Baker Book House, 1984), 303. Emphasis is his.

[lxxi] George Lyell, Principles of Geology, 2 vols. (New York: D. Appleton and Company, 1887), 1:318.

[lxxii] Ibid.

[lxxiii] Ibid., 304-305.

[lxxiv] Ibid., 305.

[lxxv] Harold S. Slusher, Critique of Radiometric Dating 2nd ed. (San Diego: Institute for Creation Research, 1981), 2.

[lxxvi] Ibid.

[lxxvii] Lyell, 317.

[lxxviii] Duane T. Gish, Evolution: The Challenge of the Fossil Record (El Cajon, California: Creation-Life Publishers, 1986), 47.

[lxxix] Darwin, 253.

[lxxx] Deut. 32:32

[lxxxi] Thomas P. Gamwell and Harold S. Slusher, Age of the Earth (El Cajon, California: Institute for Creation Research, 1978), 6.

[lxxxii] Ibid., 87.

[lxxxiii] Ibid., 87-88.

[lxxxiv] Ibid., 88.

[lxxxv] George Gaylord Simpson, Fossils and the History of Life (New York: Scientific American Books, Inc., 1983), 67-68.

[lxxxvi] Ibid., 68.

[lxxxvii] Gish, 47.

[lxxxviii] Slusher, Critique of Radiometric Dating, 53.

[lxxxix] Gish, 51.

[xc] Trevor Norman and Barry Setterfield, The Atomic Constants, Light, and Time (Menlo Park, California: Stanford Research Institute International, 1987), 79-80.

[xci] Ibid., 85.

[xcii] Simpson, 58.

[xciii] Gish, 47.

[xciv] Lyell, 303.

[xcv] Simpson, 62-63.

[xcvi] Morris, Scientific Creationism, 120.

[xcvii] Richard B. Bliss et al., Fossils: Key to the Present (El Cajon, California: Creation-Life Publishers, 1980), 13-14.

[xcviii] Simpson, 63-65.

[xcix] Bliss et al., 14.

[c] Lyell, 313.

[ci] Darwin, 251.

[cii] Bliss et al., 14.

[ciii] Morris, Biblical Basis for Modern Science, 312-313.

[civ] Simpson, 9.

[cv] Bliss et al., 4.

[cvi] Ibid., 6.

[cvii] Gish, 50.

[cviii] Henry M. Morris and John C. Whitcomb, The Genesis Flood (Phillipsburg, New Jersey: Presbyterian and Reformed Publishing Co., 1961), 271-272.

[cix] Ibid., 272.

[cx] Ibid.

[cxi] Ibid., 451-453.

[cxii] 1 Pet. 3:3-6 Emphasis mine.

[cxiii] George Gamow, The Creation of the Universe (New York: The Viking Press, 1952), 20.

[cxiv] Morris, Scientific Creationism, 17.

[cxv] Gamow, 23.

[cxvi] Ibid.

[cxvii] Harold S. Slusher, The Origin of the Universe (El Cajon, California: Institute for Creation Research, 1980), 2.

[cxviii] Ibid., 34.

[cxix] Norman and Setterfield, 80.

[cxx] Ibid., 85.

[cxxi] Slusher, Origin of the Universe, 43.

[cxxii] Gamow, 32.

[cxxiii] Slusher, Origin of the Universe, 46.

[cxxiv] Emmett L. Williams, "Thermodynamics and Evolution: A Creationist View," in Thermodynamics and the Development of Order, ed. Emmett L. Williams (n.p.: Creation Research Society, 1981), 10.

[cxxv] Ibid.

[cxxvi] Morris, Scientific Creationism, 25.

[cxxvii] Ibid.

[cxxviii] Ibid., 26.

[cxxix] Morris, The Genesis Record, 40.

[cxxx] Ibid., 41.

[cxxxi] Ibid.

[cxxxii] Psalm 33:6

[cxxxiii] Gen. 2:2

[cxxxiv] Heb. 1:3

[cxxxv] Gen. 1:31

[cxxxvi] Henry M. Morris, "Thermodynamics and Biblical Theology," in Thermodynamics and the Development of Order, ed. Emmett L. Williams (n.p.: Creation Research Society, 1981), 129.

[130] Ibid., 130.

[cxxxviii] Rom. 1:20-22

BIBLIOGRAPHY

The Bible. King James Version.

Bliss, Richard B. et al. Fossils: Key to the Present. El Cajon, California: Creation-Life Publishers, 1980.

Clark, David L. Fossils, Paleontology, and Evolution. 2nd ed. Dubuque, Iowa: Wm. C. Brown Company, 1976.

Darwin, Charles. The Origin of Species. 6th ed. London: Watts & Co., 1929.

Dobzhansky, Theodosius. Genetics of the Evolutionary Process. New York: Columbia University Press, 1970.

Farrington, Benjamin. What Darwin Really Said. London: MacDonald, 1966.

Gale, Barry G. Evolution Without Evidence. Albuquerque: University of New Mexico Press, 1982.

Gamow, George. The Creation of the Universe. New York: The Viking Press, 1952.

Gamwell, Thomas P. and Slusher, Harold S. Age of the Earth. El Cajon, California: Institute for Creation Research, 1978.

Gish, Duane T. Evolution: The Challenge of the Fossil Record. El Cajon, California: Creation-Life Publishers, 1986.

Hardy, Alister Clavering, Sir. Darwin and the Spirit of Man. London: Collins, 1984.

Hutton, Frederick Wollaston. Darwinism and Lamarckism. New York: G.P. Putnam's Sons, 1899.

Laporte, Leo F. Evolution and the Fossil Record. San Francisco: Walt Freeman and Company, 1978.

Lyell, George. Principles of Geology. 2 vols. New York: D. Appleton and Company, 1887.

Marsh, Frank L. Variation and Fixity in Nature. Mountain View, California: Pacific Press Publishing Assoc., 1976.

Mayr, Ernst. Systematics and the Origin of Species. New York: Columbia University Press, 1942.

Miller, Jonathan. Darwin for Beginners. New York: Pantheon Books, 1982.

Morris, Henry M. The Biblical Basis for Modern Science. Grand Rapids: Baker Book House, 1984.

---. The Genesis Record. Grand Rapids: Baker Book House,

1976.

---. Scientific Creationism. 2nd ed. El Cajon, California: Master Books, 1985.

---. "Thermodynamics and Biblical Theology." In Thermodynamics and the Development of Order Ed. Emmett L. Williams. n.p.: Creation Research Society, 1981.

Morris, Henry M. and Whitcomb, John C. The Genesis Flood. Phillipsburg, New Jersey: Presbyterian and Reformed Publishing, Co., 1961.

Norman, Trevor and Setterfield, Barry. The Atomic Constants, Light, and Time. Menlo Park, California: Stanford Research Institute International, 1987.

Simpson, George Gaylord. Fossils and the History of Life. New York: Scientific American Books, Inc., 1983.

Slusher, Harold S. Critique of Radiometric Dating. 2nd ed. San Diego: Institute for Creation Research, 1981.

---. The Orgin of the Universe. El Cajon, California: Institute for Creation Research, 1980.

Williams, Emmett L. "Thermodynamics and Evolution: A Creationist View." In Thermodynamics and the Development of Order. Ed. Emmett L. Williams. n.p.: Creation Research Society, 1981.