

Correlation of the Bible and Science



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Chapter One

Has Science Proved the Bible Obsolete?

Can a man be both a scientist and a Christian? Is there a conflict between science and the Scriptures? Why do some scientists believe in God and yet others reject Him?

Anyone can write a question mark over anything, and some people with a scientific turn of mind seem to take delight in writing a question mark over the Bible and God, shocking and shaking people who have held a faith in God in their hearts. Each of us has built within us a capacity for doubt, and a capacity for faith, with the will of man being the determining factor. Why does one scientist, in possession of the same facts as another, believe and accept Jesus Christ and the teachings of the Bible, and the other reject Him? Since they are both scientists, it couldn't be the facts of science that keep the one from believing. No, it is simply that he exercises his will to doubt rather than to believe. Faith or doubt are determined by the will, not by proof and facts. The believer has **everything to gain and nothing to lose.**

Many educated people today are friendly toward Christianity, but they are not convinced of its truth. They have a sneaking suspicion that it is not intellectually respectable. Many of these people were brought up to accept the Bible and the Christian faith uncritically, but when they began to ask questions for themselves, they found it easier to discard the religion of their childhood than to take the trouble to investigate its credentials. Most of these people do not know that the Christian faith is not founded on wishful thinking or blind acceptance of tradition, but rather on a tremendous body of real objective evidence.

I know that the Bible is the Word of God, and a reader with an open mind should have little difficulty in reaching the same conclusion. God loves you and longs to reveal Himself to

you through His Word.

Did you know that for years the Science Research Bureau, headed by the late Dr. Harry Rimmer, publicly offered a reward of one thousand dollars to any person who could prove the existence of a scientific blunder in the Bible? Although that offer was made in twenty-seven different countries, the thousand dollars is still uncollected. In November of 1939 a suit was brought against Dr. Rimmer by a Mr. William Floyd of New York. Mr. Floyd thought that he had found several bonafide scientific blunders in the Bible. The judge, Honorable Benjamin Shalleck of the Fourth District Municipal Court heard both sides of the case and awarded his decision in favor of the Bible (*That Lawsuit Against the Bible*, by Harry Rimmer, W.B. Eerdmans Publishing Co., Grand Rapids, Mich. 1956). More recently Dr. John Grebe, formerly director of both Nuclear and Basic Research at Dow Chemical, Midland, Michigan, has offered a one thousand dollar reward along similar lines.

The absence of error in the Bible is truly remarkable, for all other ancient books, and even many recent ones, contain scientific blunders and mistakes. In the sacred writings of the Hindus, you find such fantastic nonsense as this: The moon is 50,000 leagues higher than the sun and shines by its own light; the earth is flat and triangular and is composed of seven layers — one of honey, another of sugar, a third of butter and still another of wine. This whole seven-layer mass is supposedly borne on the heads of many elephants which, in shaking or stumbling, produce earthquakes. Read the Koran and you find that the stars are torches set in the lower heavens, and that men are made out of baked clay.

Why is it that ridiculous teachings like these are not to be found in the Bible, which is much more ancient? Very plainly there is only one adequate explanation — a higher intelligence than that of man presided over the composition of the Bible and preserved its writers from error.

Everything about us points with overwhelming force to a personal Creator Whose mind and power are infinite. Dr. George Gallup, director of the Gallup Poll stated: "I can prove God statistically. Take the human body alone — the chance that all the functions of the individual would just happen is a statistical monstrosity." Physicist Dr. Robert Millikan, a Nobel

Prize winner declares: "To me it is unthinkable that a real *atheist* could be a scientist." Dr. C.A. Chant, professor of Astrophysics at Toronto University stated: "I have no hesitation in saying that at least ninety percent of astronomers have reached the conclusion that the universe is not the result of blind law, but is regulated by a great intelligence." The Bible says in Psalm 14:1: "The fool hath said in his heart, There is no God. . . ."

But let us look at some of the sciences and see how they agree with the truth of the Bible. (Two excellent sources for additional material in this area are *Bible-Science Newsletter*, P.O. Box 1016, Caldwell, Idaho, 83605 and *The Bible and Modern Science*, Henry M. Morris, Colportage Lb. No. 322, Moody Press, 1968.)

ASTRONOMY

Before the invention of the telescope, scientists regarded the number of stars as practically determined. Ptolemy stated that there were 1,058 stars. Kepler counted 1,005 stars and Tycho Brahe catalogued 777. Now these men of science were considered great scientists in their day — but they were wrong! We now know that there are billions and billions of stars. It is literally impossible to count them. But this is exactly what was written in the Bible thousands of years ago: "As the host of heaven cannot be numbered . . ." (Jeremiah 33:22). So here we see an example out of history where science and the Bible were in conflict — but as man uncovered more of the truth, he found that true science does not contradict the Bible.

Consider what the Bible has to say about gravity in Job 26:7: "He . . . hangeth the earth upon nothing." (No one knows what gravity is or why it is — only its effect.) Consider Isaiah 40:22 where, speaking of God, the prophet Isaiah recorded: "It is he that sitteth upon the circle of the earth. . . ." The word "circle" here is the Hebrew word "Khug" which some Hebrew scholars say may be better translated as sphericity or roundness. The Book of Isaiah was written approximately 2,700 years ago, yet as recently as 500 years ago, educated men were taught that the earth was flat.

For more information on the Bible and astronomy, the

reader should consult *Science Speaks*, by Peter W. Stoner, Colportage Library, No. 346, Moody Press, 1963.

ORNITHOLOGY AND AERODYNAMICS

Isaiah 40:31: "But they that wait upon the Lord shall renew their strength; they shall mount up with wings as eagles; they shall run, and not be weary; and they shall walk, and not faint." In addition to the obvious spiritual truth, this Scripture implies a unique quality in the eagle's wings of being able to fly without becoming weary. This is exactly what we have discovered in the wind tunnels of the University of Oklahoma while conducting aerodynamic research on birds during the spring of 1971. The eagle has six slotted feathers at the tip of each wing which curve upward in gliding flight. Our wind tunnel measurements indicated these upward-curved slotted-tip feathers reduce the size of the vortex emanating from each wing tip. This in turn reduces the drag on the wings, thus allowing the eagle to soar large distances in air currents without the need of beating his wings. Thus 2,700 years after the Scripture in Isaiah was written, science has stumbled onto the same truth.

ARCHAEOLOGY

There exists today not one unquestioned find of archaeology that proves the Bible in error at any point. Jericho has been found with its walls collapsed by Dr. John Garstang, director of the British School of Archaeology in Jerusalem. Dr. Garstang found that the walls had fallen outward even though they were fifteen feet high and ten feet thick — completely substantiating the Biblical account. Furthermore, he found from pottery and scarab evidence that the city had been destroyed about 1400 B.C., coinciding with Joshua's date.

Nebuchadnezzar's furnace, where Shadrach, Meshach, and Abednego were placed, has apparently been found.

Solomon's garrison cities of Hazor, Megiddo and Gezer (mentioned in I Kings) have been found. In addition his stables, seaport and copper refineries have been found, and proved that Solomon indeed had a very wealthy empire.

The Hittites are mentioned forty-six times in the Bible. A

century ago critics of the Bible claimed that no such people existed. Since that time archaeologists have found Hittite inscriptions revealing that they were one of the powerful nations of ancient time.

The critics also questioned the exodus and conquest of Canaan by the Israelites in 1400 B.C. (a date calculated from the Bible). However, the critics were silenced on this matter when 377 clay tablets were found in Egypt which described these events. These tablets belonged to Pharaohs Amenhotep III and IV who ruled in the period of 1500-1400 B.C.

Two excellent books which would be helpful to the reader in this area are *An Introduction to Bible Archaeology*, Colportage Library, No. 316, and *Genesis and Archaeology*, Colportage Library, No. 499, both by Howard F. Vos and published by Moody Press, Chicago in 1959 and 1963 respectively.

METEOROLOGY

The "water cycle" whereby rain water is drained off by rivers into the ocean, then raised back to the sky by evaporation and then carried by wind currents back to the land again, became an accepted fact in this new science about a century ago. Yet this fact was strikingly set forth in the Bible thousands of years ago in Ecclesiastes 1:6-7: "The wind goeth toward the south, and turneth about unto the north; it whirleth about continually, and the wind returneth again according to his circuits. All the rivers run into the sea; yet the sea is not full; unto the place from whence the rivers come, thither they return again."

ICHTHYOLOGY

The story of Jonah and the monster of the sea has been difficult for many to believe. It was thought at one time that no fish or whale was large enough to swallow a man. However, the ichthyologists now tell us there are several fish large enough to swallow a man, and three of these are the sperm whale, the white shark and the rhinodon shark. There have been a number of accounts, some of them well authenticated, of men in modern times having been swallowed by one of the three

previously mentioned sea monsters, and then later being rescued alive. For example, an article which appeared in the *Literary Digest* shortly before 1900, presented the account of a Mr. James Bartley who was a seaman on the whaler, *Star of the East*. He was swallowed by a whale in a harpooning foray. A day later when the stomach of the whale was cut open, James Bartley was found alive but unconscious. Following treatment in a London hospital he recovered, but his skin was permanently tanned by the action of the gastric juices.

There is no reason for us not to believe in an actual miraculous intervention by God in the preservation of Jonah's life. The Lord Jesus (Matthew 12:40) accepted the story of Jonah as authentic history, and even used it as a symbol of His own coming death and resurrection.

MEDICINE

There are many examples of perfect correlation between the Bible and modern medical science. Consider the following example which leaves little doubt that God is the author of our Bible (taken from *None of These Diseases*, by S.I. McMillen, M.D., Spire Books, Westwood, New York).

In Genesis 17:12 God is speaking to Abraham: "And he that is eight days old shall be circumcised among you, every man child in your generations. . . ."

Medical doctors have found during the past sixty years that circumcision is a valuable health practice, since it greatly reduces the occurrence of penile cancer in males and cancer of the cervix in their wives. Thus, after many laborious years of experimentation, medical science has at last confirmed, four thousand years late, that the best method of preventing two deadly cancers is circumcision.

Another important item that medical science has recently discovered is the clotting factor in the blood. The textbook *Holt's Pediatrics* reports that a newborn infant has "peculiar susceptibility to bleeding between the second and fifth days of life. Hemorrhages at that time, though often inconsequential, are sometimes extensive; they may produce serious damage to internal organs, especially to the brain, and cause death from shock and exsanguination." It is felt that this tendency to hemorrhage is due to the absence of the important blood-

clotting element, vitamin K. Vitamin K is not manufactured in the baby's intestinal tract until the fifth to the seventh day. Therefore, the first day that one knows for sure that it is safe to perform circumcision is the eighth day, the very day that God commanded Abraham to do so!

Furthermore, there is a second element that promotes the clotting of blood. This element is prothrombin. A chart in *Holt's Pediatrics* shows that when a baby is born, the amount of prothrombin in his blood stream is less than normal. The curve of prothrombin concentration dips to a very low value on the third day of the baby's life and then skyrockets to a level ten percent above normal on his eighth day. It then levels off to normal values after the eighth day.

Thus, one observes from the concentration of vitamin K and prothrombin that the perfect day to perform a circumcision is the eighth day — a fact known to many doctors and pointed out in the February, 1947 *Journal of the American Medical Association*. So again we see science correlating with the Bible — but four thousand years late! (Another excellent book on the Bible and medicine is *The Bible and Modern Medicine*, by A. Rendle Short, Moody Pocket Book, No. 98, Moody Press, Chicago, Illinois, 1967.)

GEOLOGY

There are many areas of geology that correlate with the Bible, but I would like to confine my remarks to just a few of them.

Consider first some Scripture from the Bible which has been hard for some people to interpret: “. . . for the Lord God had not caused it to rain upon the earth, and there was not a man to till the ground. But there went up a mist from the earth, and watered the whole face of the ground” (Genesis 2:5-6).

These verses might possibly be explained by the Vapor Canopy Theory or the Greenhouse Effect. This theory states that prior to the Flood of Noah* the earth's atmosphere contained a tremendous amount of water vapor, much more than at present. We know that there is enough water in the oceans of the world to cover the entire earth to a depth of about two miles, if the earth's topography was smoothed out. It is conceivable that much of this water was, before the Flood,

stored in a great vapor canopy around the earth. Now water vapor in the atmosphere is similar to glass in allowing the shortwave radiation of the sun to pass through, but the longwave radiation which is re-radiated from the earth is captured and reflected back to earth.

This is exactly what happens in a greenhouse. Hence, this water-vapor blanket would produce a uniformly warm, sub-tropical climate over the entire surface of the earth from the North Pole to the South Pole. This uniform climate would have caused meteorological conditions which are much different than those which occur today. High winds, storms, etc., would be unknown since they result basically from temperature differences. It is unlikely that rain could have been produced, even though there could have been a continuous interchange of water near the surface by the water condensing as dew at night and evaporating during the day. This inference is supported by the previously quoted Scripture in Genesis 2:5-6.

In addition, with no water except transparent water vapor in the air, the rainbow would be unknown until after the Flood, when its first appearance made it a beautiful and striking token of God's promise to Noah (Genesis 9:13-15).

But is there any geological evidence that would tend to support this theory? The answer is definitely yes! Coral reefs formed by sea creatures that can live only in warm waters have been found so far north that it is believed now that they underlie the North Pole itself. Tropical animals have been found fossilized not only in Siberia, Greenland and Alaska, but in practically every region in the world. Fossil ferns and other tropical and temperate vegetation, along with coal beds, have been found in the great continent of Antarctica.

The Siberian deposits of elephants should also be mentioned. Literally millions of these animals have been entombed in the frozen soil in much of Siberia. A regular trade in fossil ivory has afforded livelihood to the natives of this region since at least 900 A.D. In the more northern parts of the country, large numbers of mammoths have been preserved. A number of mammoth carcasses have been found in a standing upright position in the ground as if they had sunk down where they lived and had been frozen in that position. The evidence of the congested blood in the blood vessels of the frozen

mammoths indicates that they died by **drowning** in spite of the fact that the modern elephant is a very strong and long swimmer! The remains of the last meal, consisting of elephant grass and other semi-tropical plants now foreign to that region, have been found in their stomachs. Other animals such as rhinoceros, oxen and sheep have also been found frozen in the earth of Siberia.

All of this evidence led English scientist Sir Henry Howorth in his book *The Mammoth and the Flood* (1887) to conclude that a very great catastrophe occurred in the form of a widespread flood of waters which not only killed the animals and buried them under continuous beds of loam and gravel, but also was accompanied by a great and sudden change in climate which froze the animal flesh under the ground. Geographer Donald Patten, in his book, *The Biblical Flood and the Ice Epoch* (Pacific Meridian Pub. Co., Seattle, 1966) builds a strong case for the Greenhouse Effect plus a God-sent astral catastrophism which deposited vast ice masses near the magnetic poles. Patten's arguments indicate that an astral body composed of ice crystals was captured in an elliptical orbit about the earth, which resulted in catastrophic tides upon the earth, turbulence, and terrific rain storms which depleted most of the water vapor in our atmosphere. The vast quantities of ice near our poles could have resulted from the ice crystals (which possessed a positive or negative electric charge) traveling down the magnetic lines of flux to the region of our magnetic North Pole and magnetic South Pole.

Another effect of the "Greenhouse Theory" could have been a reduction in the amount of shortwave radiation reaching the earth's surface from the sun. This would be caused by the large amount of water vapor and ozone in the atmosphere. Ozone is concentrated in the upper atmosphere zone, and in the pre-Flood era it was probably in much greater concentration than in our present atmosphere. This would be due to the reduced vertical turbulence in the uniform atmosphere surrounding the earth, which would reduce the turbulent mixing and cause large concentrations at the upper levels. Therefore, water vapor would not only shield the earth from solar radiation, but would also partially shield the outer ozone layer from the earth's longwave radiation. The earth's longwave radiation causes the ozone (O₃) to recombine back

to its normal diatomic state of oxygen (O₂). Thus the water vapor and ozone would form an effective shield against the sun's shortwave radiation.

One of the most intriguing theories of aging of humans states that short wavelength radiation leads to premature aging and reduces the life span. X-rays, cosmic radiation and the sun's ultraviolet rays are known to have somatic (non-hereditary) effects as well as genetic effects (gene mutations) which injure not only the individual but also his descendants. Most investigators agree there is no threshold below which ionizing radiation has no effect on living matter.

The pre-Flood atmosphere would have far less background radiation than does the present one. Therefore, there must have been fewer somatic and hereditary mutations. Hence everything, including the climate, favored the continued production of larger, stronger, longer-lived specimens of every type of creature. This, of course, is what we have seen in the fossil record. According to the Bible, many men lived to be more than 900 years old before the Flood. However, with the vapor canopy precipitated at the time of the Flood, the mutation rate speeded up, the size and strength of the average creature deteriorated, many species became extinct, and the length of the life span began a steady decline. After the Flood, the ages of the patriarchs in the Bible exhibited a slow but steady decline from that of Noah, who lived 950 years, through Salah who lived 433; Abraham lived 175 years; Moses died an old man at 120 years; to the familiar Biblical seventy year life span (Psalm 90:10).

Another possible reason for the decline in life span following the Flood would be the increased level of ozone at the earth's surface. Patten pointed out that ozone is a chemical radical which, when ingested through the lungs and into the blood stream, can be diffused to the cells as a substitute for oxygen. Fettner found that "ozone is capable of producing chromatid breakages in human cell cultures, which are apparently identical to those produced by x-rays." Thus ozone, even when ingested in only several parts per million, has a toxic effect and will react and injure many types of tissue, including reproductive tissue.

It should also be pointed out that the tradition of longevity among the folklore of Egypt, Syria, Persia, India and Greece is

well known. If ancient people (prior to the Flood) did live for hundreds of years, then one would certainly expect to find stories and legends concerning their great age to exist in folklore — and this is exactly what we find!

GEOCHRONOLOGY

Is the earth five billion years old as some geologists say, or is it only about 7,000 years old according to calculations based on the book of Genesis in the Bible? Dr. Melvin Cook (President of IRECO Chemicals and Professor of Metallurgy, University of Utah) and Dr. Robert L. Whitelaw (Department of Nuclear and Mechanical Engineering, Virginia Polytechnic Institute) believe that the radiocarbon method of dating (C-14 method) not only confirms Biblical history, but a creation of the earth less than 10,000 years ago. (See *Carbon-14 and the Age of the Atmosphere* by M.A. Cook and *Time, Life and History in the Light of 15,000 Radiocarbon Dates* by R.L. Whitelaw both in June 1970 issue of *Creation Research Soc. Quart.*) In addition, (see Figure 1) a statistical analysis by Prof. Whitelaw of 15,000 radiocarbon datings show an unmistakable worldwide disappearance of man and animals for a long period of time about 5,000 years ago. This is a remarkable confirmation of the details of the worldwide Genesis Flood survived by Noah, his family and a boatload of animals.

As can be seen from Figure 1 none of Prof. Whitelaw's 15,000 radiocarbon dates are over 7,000 years old — which corresponds closely with the age of the earth according to calculations of some Bible scholars.

Both Cook and Whitelaw noted the formation of C-14 exceeded the known rate of decay for C-14 by a significant amount and point out the fallacy in the assumption of worldwide equilibrium between radiocarbon formation and decay. This erroneous assumption has caused the reporting of apparent ages of organic material of up to 50,000 years. However, when the known non-equilibrium conditions are used to replace the assumed equilibrium, all of the radiocarbon ages are telescoped to within less than 10,000 years. This includes published dates on Neanderthal-man bones, saber-toothed tigers, mammoths, coal, natural gas, crude oil, etc.!

The radiological methods such as Potassium-Argon, etc.,

that have been used by some geologists to measure the age of rocks up to five billion years are fraught with a great variety of possible experimental errors and shaky assumptions according to Cook, Whitelaw, Morris and Whitcomb (*The Genesis Flood*, Pres. & Reformed Pub. Co., 1969). A great majority of measurements have had to be rejected as useless because of the serious problems inherent in the methods used. For example, in the *Journal of Geo-Physical Research*, Vol. 73, No. 14, July 15, 1969, it is reported that lava rocks formed in 1800 and 1801 in Hualalai, Hawaii, show an age of formation of 160 million to three billion years by the Potassium-Argon dating method. Yet, the report says with dismay, the age of formation of the rocks is known to be only 170 years.

Another report in *Science*, Vol. 162, page 265, October 11, 1968, shows Potassium-Argon dates of twelve to 21 million years for volcanic rocks known to be less than two hundred years old!

MATHEMATICS AND PROPHECY

There are three hundred prophecies in the Old Testament that were fulfilled by the first coming of Jesus Christ. Professor Peter Stoner, a mathematician in one of California's colleges, gave a homework assignment concerning Old Testament prophecies and probability to students taking his course in mathematical probability. There were forty-eight students in this class and each student was assigned the problem of estimating the probability that Jesus Christ just happened to fulfill one of the prophecies by chance. For example, one student may have been assigned the prophecy in Micah 5:2 which states that the Messiah would be born in Bethlehem. Well, Jesus Christ was born in Bethlehem, so this student had to estimate that out of all the places on the earth, what were the odds that Jesus Christ would be born in Bethlehem.

To get the total probability that Jesus Christ just by chance happened to fulfill forty-eight prophecies simultaneously, the individual probabilities had to be multiplied together. After doing so, Professor Stoner found that the total probability was one chance out of 10^{180} (one followed by 180 zeroes.) To put it another way, the chances that Jesus Christ actually is the Son of God are greater than 10^{180} to one. This

was calculated using only forty-eight of the three hundred prophecies, so undoubtedly the odds are extremely larger than 10^{180} to one.

The odds of 10^{180} to one are more of a “sure thing” than anything you can predict in your future. For example, let’s suppose you are 20 years old and from insurance mortality tables we know the yearly death rate of persons 20 years of age. It turns out that the chances of your dying in the next second are one chance out of 10 billion, or to turn it around, the chances of your living in the next second are 10^{10} to one. 10^{10} is an extremely large number, but infinitesimally small compared to 10^{180} !! To put it another way, the chances that Jesus Christ is actually the Son of God, are almost infinitely greater than the chances you have of being alive this next second!!

*Fernand Navarra, a French explorer, found timbers in a deep crevasse at 13,800 feet on a glacier on Mount Ararat in 1955. He believes they are from Noah’s Ark. Laboratories in Paris and Madrid reported the wood samples were white oak and almost 5,000 years old. No oak trees are within 300 miles of Mt. Ararat, and 13,800 feet is above the timber line. (For more information see *In Search of Noah’s Ark*, by Bob Hill, *Moody Monthly*, April, 1970, pp. 31-33).

Chapter Two

Evolution: Satan's Fairy Tale for Adults

During the first part of this century the proponents of the theory of evolution (hereafter called evolutionists) waged a battle with those scientists (hereafter called creationists) who held to the Biblical creation of life as described in the book of Genesis. By the time of the 1930s it appeared that the evolutionists had won their battle because so few opposing voices were heard. However, about fifteen or twenty years ago a curious thing developed. There was a rebirth of the challenge to evolution and a rising tide of articles and books appeared which presented new evidence that apparently exposed large cracks in the foundation of the theory of evolution and gave support to the Biblical claims of creation (see for example References 1-19).

Much of the credit for this renewed battle between creationist and evolutionist goes to the Creation Research Society, which is a group of scientists devoted to researching and publishing in the field of scientific creation. Their arguments have not come from religious grounds but from scientific evidence.

The history of science is the history of births, crises, and deaths. The birth is the birth of a theory which may seem to explain known observations. Then a crisis develops. It does not explain some sets of observations or facts. It then dies and a new theory may rise to take its place. The theory of evolution is in the second phase. It is facing at least four crises which I believe will cause its demise in the not-too-distant future.

The four crises confronting evolution at present are: (a) the second law of thermodynamics; (b) fossil gaps; (c) no known mechanism; and (d) mounting evidence for a young earth.

Thomas S. Kuhn²⁰ has examined the history of many of

the scientific revolutions that toppled old theories and replaced them with new ones. Kuhn has shown that it was only competition between segments of the scientific community that ever actually resulted in the rejection of one previously accepted theory or in the adoption of another. The rejection of an old theory by a new one was often a stormy battle between supporters of both theories. For men who supported the old theory, the new theory reflected poorly upon much of the scientific work they had already successfully completed.

James Coppedge²¹ has noted that when a fashionable idea has the center of the stage in a society, it tries to drive off opposing viewpoints. For example, Maxwell's equations were as revolutionary as Einstein's, and they were resisted accordingly. X-rays were denounced by Lord Kelvin as an elaborate hoax.²⁰ Thomas Young's paper on diffraction and interference aroused a storm of protest, even of derision and abuse. His most vocal assailant, Henry Brougham (later Lord Chancellor of England), wrote: "We wish to raise our feeble voice against innovations that can have no other effect than to check the progress of science and renew all those wild phantoms of the imagination which Bacon and Newton put to flight from her temple. . . ."²² During Pasteur's campaign to disprove the Theory of Spontaneous Generation he was attacked by Pouchet who mockingly argued that if the air really contained seeds of life as Pasteur supposed, the seeds would have to be so numerous that the air would be choked with them and have the density of iron.²³

WHO BELIEVED EVOLUTION IS A FACT?

Many rash and patently false assertions (primarily by writers of high school or college freshmen biology texts) as to the "fact" of evolution have been claimed. For example B.B. Vance and D.F. Miller²⁴ wrote in their high school textbook: "All reputable biologists have agreed that evolution of life on earth is an established fact." J.M. Savage²⁵ in his introductory college biology text states: "No serious biologist today doubts the fact of evolution. . . . We do not need a listing of evidences to demonstrate the fact of evolution any more than we need to demonstrate the existence of mountain ranges." However, when one examines the "proofs" for the "fact of evolution," it

appears that writers like Vance, Miller, and Savage are shamelessly bluffing.

Not all scientists, nor all biologists accept the statement that evolution is a proven fact. For example, anyone who thinks that only uninformed cranks reject Darwinism should read Dr. W.R. Thompson's foreword to the new edition of Darwin's *Origin of the Species*, published in the Darwinian Centennial Year as a part of the Everyman's Library series: "As we know, there is a great divergence of opinion among biologists, not only about the causes of evolution but even about the actual process. This divergence exists because the evidence is unsatisfactory and does not permit any certain conclusion. It is therefore right and proper to draw the attention of the non-scientific public to the disagreements about evolution. But some recent remarks of evolutionists show that they think this unreasonable. This situation, where men rally to the defense of a doctrine they are unable to defend scientifically, much less demonstrate with scientific rigor, attempting to maintain its credit with the public by the suppression of criticism and the elimination of difficulties, is abnormal and undesirable in science."

The tone and tenor of other serious scientists opposing the theory of evolution are aptly illustrated by the following quotes:

Dr. Edwin Conklin, biologist, Princeton University, in *Reader's Digest*, January, 1963: "The probability of life originating from accident is comparable to the probability of the unabridged dictionary resulting from an explosion in a printing shop."

Dr. Erwin Chartoff, Columbia University, (on evolution): ". . . Our time is probably the first in which mythology has penetrated to the molecular level!"

President Leavitt of Lehigh University: "Protoplasm evolving a universe is a superstition more pitiable than paganism."

Dr. T.N. Tahmisian, physiologist, Atomic Energy Commission, U.S.: "Scientists who go about teaching that evolution is a fact are great con men, and the story they are telling may be the greatest hoax ever. In explaining evolution we do not have one iota of fact."

Dr. Louis Bounoure, Director of Research at the National

Center of Scientific Research in France: "Evolutionism is a fairy tale for grown-ups. This theory has helped nothing in the progress of science. It is useless."

Herbert Nilssen, Director of Botany Institute, Lund University, in *Synthetische Artbildung*, Vol. I & II, 1925 (translation): "My attempt to demonstrate evolution by an experiment carried on for more than 40 years, has completely failed. . . . It is not even possible to make a caricature of an evolution out of paleobiological facts. The fossil material is now so complete that . . . the lack of transitional series cannot be explained as due to the scarcity of the material. The deficiencies are real, they will never be filled. The idea of an evolution rests on pure belief!"

In addition, there have been evolutionists with the honesty to admit that theory has not been "proven," and although they may still have "faith" in it, they have pointed out this lack of evidence:

G.A. Kerkut, Professor of Biochemistry, in *Implications of Evolution*, Pergamon Press, 1960: "There are seven basic assumptions not mentioned during discussions of evolution. . . . The first point I should like to make is that the seven assumptions by their nature are not capable of experimental verification. . . . The evidence that supports (the general theory of evolution) is not sufficiently strong to allow us to consider it as anything more than a working hypothesis."

John T. Bonner, eminent biologist wrote in review of Kerkut's book: "This is a book with a disturbing message; it points to some unseemly cracks in the foundations. One is disturbed because what it said gives us the uneasy feeling that we knew it for a long time deep down but were never willing to admit this even to ourselves. . . ." (*American Scientist*, Vol. 49, June, 1961, p. 240).

Loren Eiseley, anthropologist, in *Immense Journey*, 1957, p. 199: "With the failure of these many efforts (to create life) science was left in the embarrassing position of having to postulate theories of living origins which it could not demonstrate . . . of having to create a mythology of its own; namely, the assumption that what could not be proved to take place today, had, in truth taken place in the primeval past."

The prestigious British science journal, *Nature*, has recently included a large number of items critical of evolution.

For example, Prof. J.W. Fairbairn of the School of Pharmacy, University of London, wrote: "It is now belatedly coming to be realized that evolutionary speculation has had a deleterious effect on practical taxonomy. . . . There is a curious dishonesty about this in much biological writing. . . ."²⁶

Another correspondent to *Nature* touches upon the subject of non-believers: "There are more anti-Darwinists in British universities than you seem to realize. Among them is a friend of mine who holds a chair in a department of pure science 'in a field bearing on the evolution question,' to use your phrase. If his friends ask why he keeps quiet about his unorthodox views, he replies in words like those used recently in another connection by Professor Ian Roxburgh: '. . . There is a powerful establishment and a belief system. There are power seekers and career men, and if someone challenges the establishment he should not expect a sympathetic hearing.' . . . The majority of biologists accept the prevailing view uncritically — just as a great many competent Russian biologists were once brainwashed into accepting Lysenko's quackery. Others have thought for themselves and came to realize the flaws in contemporary Darwinism. But for them to speak out would be to invite ridicule and would probably ruin their careers."²⁷

Obviously there is an overwhelming pressure to accept evolution in the life sciences in most universities. When questioned, several graduate students in the life sciences at the University of Oklahoma have told me that they did not believe they could obtain their Ph.D. degree if their graduate committee knew they were non-believers of evolution! William Randolph Hearst, Jr.²⁸ once wrote about pressure from fashionable ideas ". . . which are advanced with such force that common sense itself becomes the victim." A person under such pressure may then act he said, "with an irrationality which is almost beyond belief."

In spite of the reluctance of many anti-Darwinists to speak out publicly against Darwinism, there are thousands who have associated themselves with organizations which actively attack the theory of evolution. One such group in England and Canada is the Evolution Protest Movement, 110 Havant Road, Hayling Island, Hants., Polloll, England. An American group is the Creation Research Society, 2717 Cranbrook Road, Ann

Arbor, Michigan, 48104. This latter group has over 500 voting members (with graduate degrees in science) and 1,500 non-voting members.

CRISIS NO. 1 — THE SECOND LAW OF THERMODYNAMICS

The study of living organisms is normally the exclusive domain of life scientists (biologists, etc.) while the Second Law of Thermodynamics is normally considered in the “camp” of the physical scientists and engineers. In addition to other “duties,” it has been used by this latter group as the “camp watchdog” to insure that no process or design heads up the “trail” toward “perpetual motion machines” and other noble but unattainable “heights.” Historically, the biologists have made little effort to apply the Second Law of Thermodynamics to their study of living organisms. In all probability this is due in large measure to their lack of study of thermodynamics in their educational backgrounds. This lack of rigor in thermodynamics shows up in their relating the mass of detailed facts of biology, not by logical thought, but by grand sweeps of the imagination (i. e. evolution). Anthony Standen in his brilliantly amusing, yet informative book, *Science Is a Sacred Cow*, managed to deftly puncture the ego of many biologists (and probably incurred their undying wrath) with statements such as: “. . . If you take a course in biology, or read any of the textbooks, you will find extremely little that can be called scientific in any scientific sense. For there is practically nothing there but descriptive facts, and facts alone do not make a science. . . . Biology is one vast mass of analogies, very different indeed from the cold logical thinking of the physicist.”¹

So perhaps there are some valid reasons for chiding the biologists for neglecting the study of thermodynamics in relation to living organisms.

The Second Law states there exists a universal principle of change in nature which, in the absence of intelligence supplied by any external source, is downhill, not uphill. It can be defined in various ways, in different contexts as follows:

(A) Classical Thermodynamics: In every process taking place in an isolated system the entropy never decreases. Entropy is a measure of the quantity of energy not capable of

conversion into work.

(B) Statistical Thermodynamics: "Each quantity of energy has a characteristic quality called entropy associated with it. The entropy measures the degree of disorder associated with the energy. Energy must always flow in such a direction that the entropy increases."²⁹

(C) Information Theory: Shannon³⁰ defined information as the difference between two entropies. Thus entropy is considered to be a measure of the degree to which information is lost or becomes garbled in the transmission process. All real transmission systems on the average either retain all information (zero change in entropy) or they lose information (increase in entropy), but they do not increase the amount of information (decrease in entropy). Thus any natural isolated process can be regarded in any of several ways: (1) as an energy conversion process in which work is being accomplished; (b) as a system undergoing a change in order or structure; (c) an information system which is transmitting or utilizing information. Entropy is a measure of: in the first case, the unavailability of work; in the second case, the decreased order of the system; in the third case, the loss of information.

All of these explanations describe a downhill trend. Living and non-living systems tend to wear out, rust out, or break down. Useful energy is lost, disorder increases, information becomes garbled. The Second Law is a conservative or degenerative process and is considered one of the fundamental laws of nature.

The crisis for the theory of evolution is that it postulates an ordered molecules-to-man process has been going on for millions of years. Staple cell life was supposed to have formed out of inorganic molecules. These simple forms of life then were supposed to have evolved into higher forms (an increase in order). Thus evolution is presumably a "creative" process which increases order, and hence it contrasts sharply with the Second Law of Thermodynamics.

Most books promoting evolution never mention the serious problem of the Second Law. Some evolutionists have merely stated that the Second Law does not apply to living systems. However, the processes of life are complex thermochemical processes and obey the laws of thermodynamics. Biochemist Dr. Harold Blum,³¹ an evolutionist himself, has

stated: "It is one of this law's consequences that all real processes go irreversible. . . . Any given process in this universe is accompanied by a change in magnitude of a quantity called the entropy. . . . All real processes go with an increase in entropy. The entropy also measures the randomness or lack of orderliness of the system, the greater the randomness the greater the entropy. . . . No matter how carefully we examine the energetics of living systems we find no evidence of defeat of thermodynamic principles. . . ."

Some evolutionists have responded to the problem posed by the Second Law by denying its applicability to open systems such as the earth. They say the steady stream of energy the earth receives from the sun is more than enough to offset the loss of energy due to entropy. However, even for systems which have local temporary growth such as (a) the growth of a pile of bricks into a building, (b) the growth of a seed into a tree, or (c) the growth of a crystal, there must be a coded plan to sift and sort and direct the energy. In the three previous examples: (a) a blueprint directs the erection of the building; (b) the genetic code of the DNA-RNA complex directs the growth of the seed into a tree; and (c) the chemical code implicit in the periodic table of elements directs the formation of the crystal. But from whence come the codes? Obviously architects or engineers provide the first code. Could mindless particles provide the DNA code and the chemical table of elements?

Other evolutionists (see, for example, references 32 and 33) imagine an open system with an excess of reactants which will cause a chemical reaction to proceed drastically to the product side by the well-known LeChatelier principle.

Suppose a reversible action $A + B = C$ is possible but little of C is formed. Suppose also that C is a more complex molecule (higher order) and needed in an evolutionary process. If an excess of A or B is added in the open system, C will be produced. Next it is assumed that the product C can be removed from the reaction site by diffusion. If this is possible, then more C can form from the reaction than would be expected thermodynamically. Dr. Emmett L. Williams, a physicist, has examined these processes and concluded ". . . that brute natural processes do not act this way. Rather, natural processes follow the Second Law. . . ." ³⁴ The burden of proof still rests on those who propose this and other

nonequilibrium thermodynamic methods as the means to bring order out of disorder.

Chapter Three

Origin of Life and Probability

The explanation offered by evolution for the creation of life goes something as follows: Many billions of years ago (perhaps 2 to 6) in the midst of the ocean, within an atmosphere of ammonia, methane, hydrogen, and water vapor, electrical charges came into the atmosphere from outside and a reaction occurred which generated amino acids. By random chance, these amino acids formed into protein, and protein is the basic building block of the cell. Then through random chance these proteins came together in the correct arrangement as mitochondria, golgi bodies, chromosomes, chloroplasts, the vacuols, the endoplasmic reticula, the ribosomes, the centrioles, and all the other parts, all of which within themselves are very complex. Through random chance the parts are hypothesized to have united and ultimately the cell itself is said to have come into being.

There are many aspects of this process that have been shown to be improbable and fallacious. Three of the more important obstacles the evolutionists have never been able to explain are:

1. The earth's atmosphere probably contained oxygen^{35,36} which would have oxidized the organic chemical compounds.^{37,38}

2. If there were no free oxygen in the atmosphere, any life formed would have been destroyed by the sun's unfiltered ultraviolet radiation, which ruptures chemical bonds in protoplasm. Life exists on earth today because we are shielded from direct ultraviolet radiation by a high level blanket of ozone.³⁷

3. The probability of forming one protein molecule by chance has been calculated by French scientist Lecomte du Nouy as one chance out of ten to the power of 243.³⁹ Swiss

mathematician Charles E Guye calculated the probability as one chance out of ten to the power of 160.⁴⁰ Using digital computers to solve a similar problem, Dr. Murphy Eden of MIT and Dr. Marcel Schutzenberger of the University of Paris both concluded that their digital computers showed that evolution was for all practical purposes impossible.^{8,9}

The first two obstacles put the evolutionist on the “horns of a dilemma,” but the third obstacle is really the impenetrable barrier that reduces evolution from a science to a religion. One must have faith of immense proportions to overcome the overwhelming evidence of mathematical probability opposing evolution.

It is instructive to look briefly at the type of probability analysis that du Nouy,³⁹ Guy,⁴⁰ and others have employed to compute the probability of life resulting by accident.

A.J. White¹⁹ has computed the probability of formation by chance a small protein, 100 amino acids long, containing 20 different amino acids in a definite sequence from a “primeval soup” where all the earth’s hydrospheric water molecules have been replaced by these 20 different amino acids. The computation is both interesting and startling! For 20 amino acids to be used to construct a protein 100 amino acids long in a particular sequence, one can compute the total possible number of configurations as 20^{100} or 10^{130} . The earth’s hydrosphere is about 1.37 times 10 to the power of nine cubic kilometers in size containing about 10^{47} molecules. Now make the highly unlikely assumption (but favorable for the chances of formation of the protein) that instead of 10^{47} water molecules, there were 10^{47} of our amino acids instead.

Now suppose that all of the 10^{47} amino acids play “musical chairs” and jump to a new position in a different protein molecule, 100 amino acids long, once every second. Hence, we produce $10^{47}/10^2 = 10^{45}$ proteins every second. Now a year is 3 times 10^7 seconds long — say 10^8 to “round it off.” Hence every year, 10^{45} times $10^8 = 10^{53}$ proteins are formed.

Now since the total number of configurations is 10^{130} , our amino acids will have to play “musical chairs” for $10^{130}/10^{53} = 10^{77}$ years before we can be absolutely sure that we have constructed our required protein molecule. But some evolutionists say the earth is “only” about 4 to 6 billion years old (round off to 10^{10} years). Therefore, we can compute the

odds against forming the protein molecule as $10^{77}/10^{10} = 10^{67}$ to one. Even if we assumed that the amino acids sped up their “musical chairs” game by a factor from once a second to 100 million times a second, the odds are still 10^{59} to one against this simple molecule having ever formed at all during the entire estimated “evolutionary life span” of earth in an environment that has been arbitrarily “weighted” to give the protein every last bit of advantage to be formed by pure chance.

The probability of the living bacterium *Escherichia coli* arising from an equilibrium ensemble of hydrogen, carbon, and nitrogen atoms was investigated by Morowitz.⁴¹ He found that the thermodynamic probability of *Escherichia coli* was the infinitesimally small number $10^{-10^{11}}$ (or $10^{-100000000000}$)! Morowitz then computed the probability of such a molecule occurring once during the entire history of the earth. He assumed he had an ensemble of atoms equal to the number of atoms in the universe (approximately 10^{100}) with sampling rates of 10^{16} per second (the time for atomic processes has a lower limit of 10^{-16} seconds) and the process continued for about 10 billion years (approximately 10^{18} seconds). Utilizing these estimates, Morowitz found that the probability that the bacterium *Escherichia coli* would occur once during 10 billion years was one chance out of one followed by 100 billion zeros! As Boltzmann (1898) said of a similar number relating to the probability of two gases in a 0.1 liter container unmixing themselves — “One may recognize that this is practically equivalent to never.”

Morowitz also calculated the probability of one of the smallest living cells, *Mycoplasma hominis* H39, arising spontaneously (at least once in 10 billion years) in an equilibrium ensemble and found it to be one chance out of one followed by 5 billion zeros — also equivalent to never.

Dr. James F. Coppedge, Director of the Center for Probability Research in Biology, Northridge, California, has done a considerable amount of analysis of the probability of forming protein molecules by random chance.²¹ Amino acids are the basic building blocks of proteins which are a major class of the complex molecules of all living matter. Amino acids of non-living matter have approximately an equal amount of left- and right-handed forms. But one of the major mysteries of life is that amino acids found in natural protein (from living

matter) contain only left-handed forms. Pasteur discovered this in 1844 by placing plane-polarized light through various solutions. Today, 130 years later, no one knows why this difference exists between the chemistry of dead and living nature. In all respects chemically and physically (except for the asymmetry) left-handed and right-handed forms are not only equivalent but indistinguishable.

Coppedge²¹ found that the probability of a living cell, composed of 239 protein molecules (this is theoretically the smallest living cell possible) with each protein having 445 amino acids, would all be left-handed (based on a $\frac{1}{2}$ preference for left-handed amino acids) is one chance out of one followed by 29,345 zeros. It would take approximately a half hour to say the number in billions — speaking rapidly all the while! For comparison, the number 10^{28} represents the diameter of the known universe in inches! Furthermore, by making all sorts of generous concessions favorable to evolution, Dr. Coppedge computed that a single protein molecule would not be expected to happen by chance more often than once ever 10^{262} years on the average. For the smallest possible living cell (239 protein molecules) it would take 10^{119841} years on the average to produce just one. If you assume the evolutionary age is 6×10^9 years, then the odds against forming this one living entity during the entire age of the earth is 10^{119831} to one! 10^{119831} is one followed by 119,831 zeros, enough to fill sixty pages of a medium size book.

Now this is only one simple protein molecule. When one considers more complex molecules like DNA which may be 1 million or more times as large, you begin to sense the enormous gigantic, titanic, stupendous faith required by those who believe that all of the wonderful, highly complex life in the plants, animals, insects, and humans came about by this same random process, billions and billions of times, over and over! Evolution is not science but physical and mathematical nonsense! This type of analysis prompted physicist Howard B. Holroyd to write: "Physical scientists, who know higher mathematics and are capable of analytical thinking, should never have allowed the thoroughly mistaken mechanical theory of evolution to reach such a degree of apparent certainty in the thoughts of nearly everyone."⁴² Similarly, Dr. A. Cressy Morrison (formerly president of the New York

Academy of Sciences) wrote in the December 1946 issue of *Reader's Digest*: “. . . There is not one chance in billions that life on our planet is an accident.”

Chapter Four

Crisis No. 2 — Fossil Gaps

If evolution were true, then the fossil record found in the earth's crust should show a slow shading in the fossil remains from the lowest one-cell forms at the bottom layers all the way up to a man at the top.

Charles Darwin⁴⁴ recognized this problem himself, when he wrote: "Long before the reader has arrived at this part of my work, a crowd of difficulties will have occurred to him. Some of them are so serious that to this day I can hardly reflect on them without being in some degree staggered. . . . Why if species have descended from other species by fine graduations do not we everywhere see innumerable transitional forms? . . . Why then is not every geological formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such finely-graduated organic chain and this perhaps, is the most obvious and serious objection which can be urged against the theory. . . ."

One wonders why Darwin even presented his theory if he was so staggered by the geological evidence against his theory.

The geological record has also revealed the surprising fact that life in its varied forms made its appearance suddenly in the Cambrian period. Prof. John W. Koltz⁴⁵ wrote: "In what is known as the Cambrian period there is literally a sudden outburst of living things of great variety. Very few of the groups which we know today were not in existence at the time of the Cambrian period. One of the problems of the Cambrian outburst is the sudden appearance of all these forms. All the animal phyla are represented already in the Cambrian period except two minor soft-bodied phyla (which may have been present without leaving fossil evidence) and the chordates. Even the chordates may have been present, since an object which looks like a fish scale has been discovered in Cambrian

rock.” World-renowned paleontologist George Gaylord Simpson has stated: “Fossils are abundant only from the Cambrian onward. . . . Darwin was aware of this problem, even more striking in his day than in ours, when it is still striking enough. . . . The case at present must remain inexplicable; and may be truly urged as a valid argument against the views here entertained.”⁴⁶

Simpson later wrote: “Fossils would provide the only direct evidence in the earliest living things, but none have been found, and it is improbable that any exist in a form still recognizable. . . .” Paleontologist Simpson wrote in 1965 that some new work in molecular biology may be fruitful in “proving” evolution.⁴⁷ However, many biologists who believe in evolution cite students to the field of paleontology for “proof” of their theory (i.e. see p. 414 of reference 47). It seems strange indeed that evolutionary scientists in that field point the student back to the first field!

Dr. Duane T. Gish has examined in detail the relation of the fossil record to evolution in his book, *Evolution, The Fossils Say No*.⁴⁸ Gish found not one bona fide fossil that indicated a transition between invertebrates, fish and reptile, or reptile and bird. He stated there has never been a single fossil ever found with part fin and part foot, or part feather and part scales. He pointed out that birds, bats, and insects all fly, yet not a single transitional fossil leading up to these species has been found.

The hope of establishing a missing link between man and ape was dealt a serious blow when anthropologist Richard Leakey published evidence that Australopithecines were long-armed, short-legged knuckle-walkers, similar to extinct African apes.⁴⁹ Up to this discovery some anthropologists had supposed that man had descended through an ape-like ancestor Australopithecus who was allegedly two million years old and was thought to have walked upright. But Leakey’s discovery of a large number of bones of Australopithecines showed he did not walk upright but walked on his knuckles and in all probability he was just an extinct ape. Even more shattering to the “ape to man” scheme was Leakey’s discovery in 1972.⁵⁰ He found bones near Lake Rudolph in Kenya, East Africa, which are similar to those of modern man but were dated much older than Australopithecus and Peking Man, our

assumed near-man ancestor. And Gish⁴⁸ reported that in a lecture early in 1973 in San Diego, Richard Leakey stated his conviction that these findings simply eliminate everything we have been taught about human origins, and he had nothing to offer in its place!

The fossil gap appears to be a very serious crisis for the theory of evolution.

CRISIS NO. 3 — LACK OF MECHANISM FOR EVOLUTION

In a debate with creationists at a public high school in Marionette, Wisconsin on November 25, 1968, Mr. Walter Valentine, a genetics instructor at the University of Wisconsin extension center, claimed that we can prove change in plants and animals and since we can prove change we can also prove evolution.⁵¹ However, he was only partly correct. There is change in plants and animals, but these observed variations have always been within well-defined limits within a kind or species. Changes from cats to dogs or rabbits to rats or from one major kind to another have never been observed. The two mechanisms for change are natural variations (which follow the Mendelian laws of heredity) and mutations.

Natural variation can produce all the varieties of modern-day horses from just one pair of horses. It is possible to obtain 1,500 varieties from a Hawthorne Plant⁵² by natural variation but no one has ever observed it changing into a rose. Because of built-in variation potential, breeding and hybrid programs in the plant and animal world are possible. In the 1800s, the sugar content of the sugar beet was increased by more than 40 percent, yet since that time no further increase has been possible. Corn production was increased through about five or six successive generations of hybrid corn, but since that time no significant increase has been obtained.

Mutations are the only observable things in the environment which affect the hereditary portion of the life cell. Radiation, mustard chemical, and perhaps LSD will change the DNA, or coding structures.⁵² However, the change is always an injury. Sometimes a harmful mutation can be used to achieve a desired result (beautiful roses, for example), but the resulting organism is always weaker and unable to

compete or survive, and if left to nature, will revert to its original form if it survives.⁵²

Evolutionist Julian Huxley⁵³ argued that only one mutation out of 100 may be considered good and this is all that is needed for evolution. However, biologist Dr. George Howe says the chances of producing present life on earth by the mutation-natural selection hypothesis is about the same as trying to have a house constructed by a carpenter who nails 99 percent of his nails in the wrong place at the wrong angle and reads the blueprint wrong 99 percent of the time.⁵⁴

In 1966 mathematicians and biologists met at the Wistar Institute in Philadelphia to discuss mathematical challenges to Neo-Darwinism Interpretation of Evolution. Dr. Murray Eden of the Massachusetts Institute of Technology (Inadequacies of Neo-Darwinism Evolution as a Scientific Theory)⁹ and Dr. Marcel Schutzenberger (Algorithms and the Neo-Darwinian Theory)⁸ both presented similar papers which reported on digital computer experiments which modeled the mutation-natural selection process over time periods similar to that dealt with in evolution theories. They both reported that their computer studies showed that evolution is not possible (at least less than one chance out of 10^{1000} according to Schutzenberger).

Geneticist Richard Goldschmidt of the University of California at Berkeley vigorously rejected the Neo-Darwinian (mutation-natural selection) theory of evolution.⁵⁵ He maintained there was a limit to the amount of change that could be accomplished through a series of mutations and hence mutations are an inadequate mechanism for evolution. He proposed instead his "hopeful monster" mechanism. He proposed, for example, that one day a reptile laid an egg and a bird hatched from the egg! However, the Neo-Darwinists dispute this and believe as Gish⁴⁸ put it, "that Goldschmidt is the one who laid the egg!" Gish also noted that: "Creationists agree with both the Neo-Darwinists and Goldschmidt — there is no evidence for either type of evolution!" There appears to be no acceptable mechanism for explaining the process of evolution.

CRISIS NO. 4 — YOUNG EARTH

A considerable amount of recent evidence has been

accumulated which points to an age of the earth and solar system which is far less than the five billion years assumed by the evolutionists. Recently Dr. Henry Morris, Director of the Institute of Creation Research (San Diego, California) and the Dean of Creation-Scientists published a table of seventy-six processes which indicate the earth is "young." I have been able to add four more to this list of seventy-six for a total of eighty (see Table I). "Young" means any age that is less than 500 million years. Of course, this is an extremely long time but small when compared to the evolutionary age estimate of five to six billion years. The importance of this table is that there is an abundance of scientific indicators which imply the earth is young — in fact, too young for life to have evolved.

The ages in Table I are based upon uniformitarian estimates. This means that due to a lack of historical data, those processes in operation today were assumed operating at the same rate during the past. Most likely many of these calculations are vastly in error because the rate processes may have been quite different in the past. For example, the influx of aluminium into the oceans via rivers yields an age of 100 years, and this is obviously too young.

It would be instructive to discuss all of the young earth estimates in Table I, but space is limited in this booklet, so only several will be examined.

CARBON 14

Dr. Melvin Cook (President of IRECO Chemicals and Professor of Metallurgy, University of Utah) and Dr. Robert L. Whitelaw (Department of Nuclear and Mechanical Engineering, Virginia Polytechnic Institute) believe that the radiocarbon (C-14) method of dating not only confirms Biblical history, but a creation of the earth less than 10,000 years ago.^{60,61} In addition, a statistical analysis by Prof. Whitelaw of 15,000 radiocarbon datings indicates a worldwide disappearance of man and animals about 5,000 year ago (see Fig. 1). This appears to be a confirmation of the details of the worldwide Genesis Flood survived only by Noah, his family, and a boat-load of animals. Whitelaw also showed that most land-based marine fossils have C-14 dates of 5,000-7,000 years!

None of Prof. Whitelaw's 11,000 radiocarbon dates were

over 7,000 years old — which corresponds closely with the age of the earth according to calculations of some Bible scholars.

Libby, the originator of the C-14 method back in the early 1950s had data from upper atmospheric balloon soundings which indicated C-14 was being formed in the upper atmosphere by cosmic radiation at the rate of 2.5 C-14 atoms per second per square centimeter of the earth's surface. However, measurements of the rate of radioactive decay of C-14 had been calculated to be 1.9 C-14 atoms per second per square centimeter of earth's surface. Hence the production rate was out of equilibrium with the decay rate by almost 20 percent. Such a condition could have resulted from a recent formation of the earth (as Whitelaw and Cook have calculated) and/or a recent "turning on" of cosmic radiation. Libby realized this implication when he stated: "If one were to imagine that the cosmic radiation had been turned off until a short while ago, the enormous amount of radiocarbon necessary to the equilibrium state would not have been manufactured, and the specific radioactivity of living matter would be much less than the rate of production . . ." (Libby, W.F., *Radiocarbon Dating*, Univ. of Chicago Press, Second Ed., p. 7, 1955).

Libby chose to ignore the 20 percent difference and assumed the C-14 production-decay process was in equilibrium. One might speculate that possibly he did not trust the balloon data or possibly his mind had been colored by the evolutionary/uniformitarianism concept that existing processes on earth have been the same for millions of years.

However, both Cook and Whitelaw had access to additional rocket-sounding measurements (a spin-off of our space program) which also supported the balloon measurements showing a significant higher rate of formation of C-14 in the atmosphere than the decay rate on the earth.

The erroneous equilibrium assumption of Libby had caused the reporting of apparent ages of organic materials of up to 50,000 years. However, when the known non-equilibrium conditions are used to replaced the assumed equilibrium, all of the radiocarbon ages are telescoped to within less than 10,000 years. This includes published dates on Neanderthal man bones, saber-toothed tigers, mammoths, coal, natural gas, crude oil, etc., all of which are supposedly hundreds of

thousands or millions of years in age according to the evolutionist!

HELIUM IN ATMOSPHERE

The amount of radioactive Helium-4 in our atmosphere has been used by Cook^{57,58} to obtain an estimate of the age of the earth. Helium-4 apparently enters our atmosphere from the solar wind and the radioactive decay of uranium rock. It has been estimated by Faul⁸² that the rate of efflux of Helium-4 into the atmosphere is about 3×10^{11} gm/year. Cook⁵⁸ has noted that the rate of loss of Helium-4 from our atmosphere is less than 10^6 gm/year and hence is negligible compared to the amount entering the atmosphere of 3×10^{11} gm/year. Since the atmosphere contains about 3.5×10^{15} gm of Helium-4 dividing by 3×10^{11} yields about 10,000 years for the earth's age. The values of 1,750 to 175,000 years shown in Table I allow for uncertainties in the efflux rate of Helium-4.

METEORITIC DUST

Hans Petterson⁵⁹ has reported that approximately 14 million tons of dust fall to the earth's surface each year. This dust is from the disintegration of meteors as they burn up in the earth's atmosphere. I have computed that at this same rate, the earth would have accumulated a layer of dust 265 ft. thick, extremely rich in nickel and iron, during five billion years. There is no apparent evidence of such a layer, which allows one to conclude the earth is far less than five billion years old.

FLUX OF CHEMICAL ELEMENTS RIVERS TO OCEANS

The rivers continually carry dissolved chemicals from the continents to the oceans. Cook⁵⁷ has noted that about 10^{10} to 10^{11} gm of uranium flows into the oceans each year. He reports the total uranium present in the ocean is about 10^{15} gm. Hence 10^{15} divided by 10^{11} or 10^{10} yields 10,000 to 100,000 years for the estimate of the earth's age. Similar calculations have been performed on 32 other chemicals, and their range of age

estimates are listed in Table I. This is obviously unrealistically low, but one might also suspect the largest number (260 million years) is much too large. The medium age for all 33 elements is approximately 100,000 years.

JUVENILE WATER

Whitcomb and Morris⁶⁸ have noted that the estimates of the influx of virgin or juvenile water to the oceans from volcanoes, etc. is in excess of one cubic mile. Since the ocean contains 340 million cubic miles of water, this suggests the earth is less than 340 million years old.

EFFLUX OF IGNEOUS ROCKS

Morris⁶² has pointed out that 10 cubic kilometers seems to be a reasonable estimate for the amount of new igneous rocks which are formed each year by flow from the earth's mantle. The total volume of the earth is about 5×10^9 cubic kilometers. Hence volcanoes could have formed the entire volume of the earth's crust in only 500 million years.

DECAY OF EARTH'S MAGNETIC FIELD

Physicist Dr. Thomas Barnes⁶⁶ in a remarkable study has noted that the earth's magnetic field has been decaying exponentially since it was first measured in 1835. His analysis shows that its half-life is about 1,400 years. Based upon a half-life of 1,400 years, the earth's magnetic field would have been equal to that of a magnetic star just 10,000 years ago. Dr. Barnes indicates that the only reasonable source for the earth's magnetic field must be free circulating electrical currents in the earth's iron core. He concluded that the heat generated by these currents flowing against an electrical resistance would have been too large for life to have existed on earth more than 10,000 years ago; hence, life has been on earth less than 10,000 years.

SOLAR SYSTEM DUST

Our space program has shown that the solar system

contains much dust and gravel. Dr. Harold Slusher has pointed out that this fact means our solar system is young — probably less than 100,000 years old.^{75,76} The reason for this estimate is based upon the fact that sunlight has pressure, which would tend to push the small dust particles out into space and cause a re-radiation braking effect on the larger particles, which would cause their orbits to continually shrink until they fell in the sun (Poynting-Robertson Effect).

POPULATION STATISTICS

It has been reported by Dr. Henry Morris⁶² that the worldwide population growth rate is about two percent per year. He further showed that if we assume it was much less in the past — say one-half percent — then the present world population of approximately 3.5 billion people could have been produced in 4,000 years. However, if man has been on earth for one million years and increasing at one-half percent per year, then there should be 10^{2100} people on earth! This is, of course, utterly impossible since it has been estimated there are less than 10^{56} molecules in the entire earth. Population statistics suggest that man has been on the earth far closer to 4,000 years than one million years.

TOP SOIL

The late Karl Mickey writing in *Man and Soil*⁸³ stated that “the soil which sustains life lies in a thin layer of an average depth of seven or eight inches over the face of the land; the earth beneath it is as dead and sterile as the moon. . . . That thin film is all that stands between man and extinction.” Of course, there are places where the top soil is much thicker (30 feet deep in the tropics), but on the average it is only a few inches deep. Prof. J.C. Taylor has stated that “it took nature 5,000 to 20,000 years to make six inches of top soil.”⁸⁴ That corresponds to an average of roughly 800 to 3,300 years per inch. This would suggest that the age of the present top soil is only about 6,000 to 25,000 years. This would imply that life as we know it could only have existed in a continuous form back to 6,000 to 25,000 years ago.

MOON ROCKS

Various reports have stated that moon rocks brought back to the earth by our Apollo astronauts have an age ranging from 2.2 billion years to 8.2 billion years. However, Cook,⁸⁵ Heymann,⁸⁶ and Coppedge²¹ have pointed out serious flaws in the dating method. A summary of the objections to moon rock dates in billions of years follows:

(1) The primary chemical elements used to date the rocks would have been vaporized or boiled off. This is deduced from the "glaze" remaining on the rock surfaces and the fact that moon samples are depleted in all substances which boil below 1,300°C. Rubidium, the key element in the rubidium-strontium technique, boils at 688°C and potassium, the main element in the potassium-argon dating method vaporizes at 744°C. Since the bulk of these elements would have moved out of the rocks, the small traces remaining would result in very old dates when the potassium-argon or rubidium-strontium dating techniques were applied.

(2) Professor Cook and scientists at Rice University's Department of Geology and Space Science are convinced the rare gases (used for radioactive dating) cannot be used for dating purposes because they came not from radiogenic sources on the moon but most likely originated in the solar wind.^{85,86} This conclusion was reached when it was discovered that the rare gases on the moon solids were remarkably similar to ratios of the same gases in the solar wind (a constant stream of particles emanating from the sun). Furthermore, Heymann and the other scientist from Rice University wrote in *Science*, January 1970: "We estimate the average 'hemispherical' exposure of a 250 (micrometer) fragment to solar wind of present-day intensity was (around) 1,000 years. . . . However, a calculation based on ⁸⁴Kr gives (around) 10,000 years. . . ."

(3) There is not enough Helium-4 on the moon for it to be four billion years old according to Prof. Cook.⁸⁵ It is the same dilemma that arises on earth. Cook's estimate of the upper bound of the moon's age is in the tens of thousands of years rather than billions.

OIL AND GAS DEPOSITS

Nobel Prize Medalist Dr. Melvin Cook has studied oil and

gas well pressures and the permeabilities of the surrounding trap formation.⁵⁸ His studies have led him to conclude that oil and gas deposits have probably resulted from sudden deep burial of organic material a relatively short time ago — 5,000 to at most 100,000 years. This is directly contradictory to the evolutionary-uniformitarian theory that these trap formations have existed for hundreds of millions of years in some cases.

Cook points out that abnormally high pressures (up to 8,000 psi) found relatively frequent in deep oil wells suggests that the oil was not in the ground for a long period. Using the measured values of the permeability of the rock surrounding the oil well, it is possible to compute the time it will take for the oil to seep through the rocks to the surface and the infinity of the surrounding strata. Cook reported the time required for a typical oil well to dissipate in this manner are on the order of thousands of years, certainly less than 100,000 years. These calculations are based upon the fluid dynamics of fluid flow through porous media, an area of science that is considered to be well-proven and non-controversial.

It is interesting to note that in eight cases studied by Hubbert and Rubey⁸⁷ all the wells except one showed active seepage at the surface. This led Cook to comment: "These facts are irreconcilable with a uniformitarianistic model, and even with a catastrophic one in which the sudden deep burial is assumed to have occurred millions of years ago, particularly in view of the seepage. . . . Apparently only the mechanism of sudden deep burial a few thousand years ago, not even sudden deep burial millions of years ago, can explain these results."⁵⁸

STALACTITES AND STALAGMITES

Many readers have perhaps visited Mammoth Cave in Kentucky or Carlsbad Caverns in New Mexico and marveled at the beautiful stalactite and stalagmite formations. You may also have been told by the guide that these dripstone formations are perhaps hundreds of thousands of years old. Recent evidence has shown these age estimates to be grossly too large. For example, a "curtain" of stalactites has been discovered growing from the foundation ceiling beneath the Lincoln Memorial in Washington, D.C.⁸⁸ Some of the stalactites (composed of calcium carbonate) were found to be as long as

five feet in length in 1968. The Lincoln Memorial was built in 1923. Hence the stalactites grew at an average rate of one and one-third inches per year.

In 1971 stalactites 2 cm. in length were discovered under a spillway ceiling of an old dam on the North Santiam River, 50 miles east of Salem, Oregon.⁸⁹ Evidence of vandalism on the ceiling suggests longer stalactite specimens may have been chiselled out. The dam was built in the late 1890s but was abandoned in 1912.

An interesting article in the October 1953 issue of *National Geographic* revealed further evidence of the rapid growth of dripstones.⁹⁰ On page 442 is a picture of a bat cemented upside down in a stalagmite! Before bacterial decay and/or scavenger attack could take their toll on the carcass, it was entombed by calcium carbonate.

Based upon these three cases, it seems probable that the upper limit on the ages of dripstone formations in caves is of the order of tens of thousands of years.

SEDIMENTS

Evolutionary-uniformitarian geologists generally assume the ocean reached its present size and chemical condition about one billion years ago. However, geologist Stuart Nevins has recently shown that the amount of ocean sediments indicates the oceans are much less than one billion years old.⁶⁵ The ocean contains about 820 million billion tons of sediments and this is being increased at the present rate of about 27.5 billion tons of sediment per year. Dividing the total mass by the present rate yields about 30 million years. There is sufficient worldwide evidence that rivers were bigger and had larger flow rates in the past than at present. If this is true, then less than 30 million years would be needed to produce the sediment. It is also interesting to note that at the rate of 27.5 billion tons per year, the present continents will erode to sea level in 14 million years!

DECAY OF COMETS

Comets undergo continual disintegration from gravitational and radiative effects of the sun and planets as they travel

around our solar system. They have been observed to diminish in size and break up. Some astronomers believe that the planets and comets were created at about the same period of time. If this is true, then if one can estimate the age of comets, then one has a measure of the age of the planets.

Certain Russian astronomers believe that the maximum life of short-period comets is about 25,000 years.^{75,76} However, Lyttleton⁹¹ has estimated the maximum life of a short-period comet as only 10,000 years.

Concerning the age of the other type of comets — long-period comets, Lyttleton had more bad news for the evolutionists: "In the whole age of this system, a comet with an average period of 100,000 years would make 4.5×10^4 returns to the sun, and if each one of these lost only 1/1000 of its mass, through tail-formation and meteor stream production, the initial mass would have been more than 10^{19} times as great as the present mass — which at a minimum means several times the mass of the sun!"⁹¹

One is left with the conclusion that the lifetime of comets points to a young age of the solar system

CORAL REEFS

There is evidence that coral reefs, which appear to represent the accumulations of the calcium carbonate remains of marine organisms, could have been formed in a relatively short period of time.⁶⁸ Kuenen, in his book, *Marine Geology*⁹² stated: "Little has been discovered of the growth rate of reefs by direct measurement. Sluiter found that a new reef established in Krakatoa after the eruption of 1883 had grown to a thickness of 20 cm. in five years, or 4 cm. per year. Other investigators have estimated reef growth at 0.1 to 5 cm. per year."

This prompted Whitcomb and Morris to comment: "This rate of growth could certainly account for most of the coral reef depths found around the world even during the few thousand years since the Deluge."⁶⁸

ESCAPE OF HIGH VELOCITY STARS

Clusters are groups of stars much smaller than galaxies.

The high velocities of the component stars are overcoming the self-gravitation of the cluster and causing the clusters to break up. Slusher has stated: "The stars are diverging from a common point so fast that in some cases if their motion were projected backwards to this common point, the cluster could have originated only several thousand years ago. . . . We have many star clusters that are disintegrating so rapidly that their ages can in no way be on the order of a billion or billions of years."⁸⁰ This presents a strong argument for a relatively young age of stars and hence of our solar system and earth itself.

PROBLEMS WITH LONG-AGE METHODS

The two methods that have been used to yield long ages (billions of years) for the age of the earth are: (1) radiometric dating of rocks and (2) index fossils found in rocks. The first method is sheer folly in that it utilizes observations made on rocks during the last several decades and attempts to extrapolate backward in time for billions of years. It is similar to observing the life of a 70 year old man for 20 seconds and attempting to describe his life for the previous 70 years. The second method (index fossils) is based upon circular reasoning. The assumed evolutionary progression of life is used to date fossils, which are then used to place rocks in chronological order which are then used to prove that life has evolved from simpler to more complex. The primary evidence for evolution is the assumption of evolution!

The most popular long-age radiometric dating methods are: (1) Uranium-Lead, (2) Potassium-Argon and (3) Rubidium-Strontium. They are all based upon three assumptions:

- (1) The rocks are a closed system.
- (2) There were no "daughter" elements initially present.
- (3) Process rate was always the same in the past.

Not one of the above assumptions is reasonable, in that they are neither provable nor testable. The concept of a rock system remaining closed for millions of years is absurd. For example, Henry Faul states in his book, *Ages of Rocks, Planets and Stars*: "Uranium and lead both migrate (in shales) in geologic time, and detailed analyses have shown that useful ages cannot be obtained with them."⁹³ 80 percent of potassium

in a small sample of an iron meteorite was removed by running distilled water over it for 4½ hours. This test caused geophysicist Harold Slusher to state: "This could move the 'ages' to tremendously high values. Groundwater and erosional water movements could produce this effect naturally."⁹⁴

Concerning the assumption of "no daughter elements initially present" — this assumption is impossible to verify — obviously no one was present when such systems were first formed. Hence it is clearly possible some of the "daughter" elements were created along with parent elements (i.e., some lead may have been created along with uranium). Clementson found very large amounts of daughter elements present in very young volcanic rocks.⁹⁸

Radiometric decay rates are not deterministic constants — they are at best only statistical averages. There are some who believe that cosmic radiation and its production of neutrinos could increase the radioactive decay rates and hence throw all of these methods into serious doubt.⁹⁵ Robert Gentry wrote concerning his study of pleochroic halos: ". . . my investigations of the uranium and thorium halos disclosed a startling circumstance: the radioactive decay rates had probably changed considerably during geologic time."⁹⁶ (Pleochroic halos are minute circular discolorations in sections of rock crystals and are produced by specks of radioactivity in the crystal.)

Scientists at Westinghouse Research Labs in Pittsburgh, Pennsylvania were able to lengthen the average half-life of Iron-57 as much as 3 percent.⁹⁷ This is further evidence that radioactive decay rates could have been variable in the past.

Nobel Prize Medalist Dr. Melvin Cook has pointed out that free neutron capture (Lead 206 + Neutron = Lead 207 and Lead 207 + Neutron = Lead 208) may completely invalidate the uranium method.⁵⁸ His analysis of uranium ore from Katanga and Canada showed no Lead 204, little or no Thorium 232 but a significant amount of Lead 208. Since the Lead 208 could not have come from common lead contamination nor from thorium decay — it must have come from Lead 207 by neutron capture. This means that literally all of the radiogenic isotopes of lead found in uranium-thorium anywhere could have been accounted for by this process alone. If true, this completely invalidates the uranium-lead calculations of billions

of years.

In the few cases where radiometric dating methods were actually used on rocks of known ages, they flunked the test miserably. The *Journal of Geophysical Research*, July 15, 1968 contains a remarkable article which indicates that the potassium-argon method predicted ages from 0.16 billion to 2.96 billion years for lava (from Kaupuleho, Hualalai, Hawaii) which was known to be 168 years old!⁹⁸ Sidney P. Clementson, a British consulting engineer, recently made a detailed study of eighteen rock samples from twelve volcanoes as published in the U.S.S.R. and ten samples from Faial Azores, Tristan da Cuuha and Mt. Vesuvius.⁹⁴ In all cases the calculated uranium-lead ages were millions and billions of years, but the rocks were known to be quite young! If calculated uranium ages are eons too large for rocks which are known to be young why should they be assumed correct when applied to rocks of unknown age?

In the last sentence of Clementson's article he stated: "This conclusion would fit the concept of a young earth and a recent creation as deduced from the Bible."⁹⁴

Conclusion

By this point you undoubtedly have reached the conclusion that there is a very strong correlation between the Bible and modern science. Therefore, the Bible and science must be casually connected. The only adequate explanation for this connection must be God. Therefore, if you believe what God said in the Bible about science then you surely must believe what God says about man's relation to Himself.

God says that all men are sinful. "For all have sinned, and come short of the glory of God" (Romans 3:23). "The heart is deceitful above all things, and desperately wicked: who can know it?" (Jeremiah 17:9).

God says that all religions do not lead to heaven; only those who come by the way of Christ can enter in. "Neither is there salvation in any other: for there is none other name under heaven given among men, whereby we must be saved" (Acts 4:12).

God says that trying to be a "good guy" will not justify a man for heaven. "For whosoever shall keep the whole law, and yet offend in one point, he is guilty of all" (James 2:10). "Knowing that a man is not justified by the works of the law, but by the faith of Jesus Christ . . ." (Galatians 2:16).

God says that you must put your faith in Jesus Christ in order to be "born again" and partake of the abundant life and enter heaven. "For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life" (John 3:16). ". . . I am come that they might have life, and that they might have it more abundantly" (John 10:10).

As an engineer who discovered the Christian faith as an adult in a Billy Graham Crusade, I can testify to the abundant nature of my new life in Jesus Christ. Even though I have failed Jesus many times, He has never forsaken me.

My chief sin before I became a Christian was my independent attitude from God. I felt that if a man had a college education and success there was no need for the crutch of

religion. It turns out I was partially right: man doesn't need religion, but he does need Jesus Christ!

Perhaps you're in the same position I was in before I accepted Christ as my Savior. If so, you can know the reality of Jesus Christ in your life right now by bowing your head and saying this simple prayer of faith: "Lord Jesus, I know that I am a sinner and can never save myself. But I believe that You died on the cross in my place and shed Your blood for my sin and arose from the dead. I do now receive You as my Savior and Lord; trusting You and You alone for my salvation. Save me now according to the promise of Your Word." ". . . him that cometh to me I will in no wise cast out" (John 6:37).

TABLE I

Uniformitarian Estimates — Age of the Earth

(Unless otherwise noted, based on standard assumptions of closed systems, constant rates, and no initial daughter components.)

| Process | Indicated Age of Earth | Ref. |
|--|---|-----------|
| 1. Efflux of Helium-4 into the atmosphere | 1,750-175,000 years | 57-58 |
| 2. Influx of meteoritic dust from space | too small to calculate | 59 |
| 3. Influx of radiocarbon to the earth system | 5,000-10,000 years | 60-61 |
| • 4. Development of total human population | less than 4,000 years | 62 |
| 5-37. Influx of 33 different chemicals (uranium, sodium, nickel, etc.) to the oceans via noperlod rivers | 100 years to 260 million (median value about 100,000 years) | 62-64, 79 |
| 38. Leaching of sodium from continents | 32,000,000 years | 64 |
| 39. Leaching of chlorine from continents | 1,000,000 years | 64 |
| 40. Leaching of calcium from continents | 12,000,000 years | 64 |
| 41. Influx of sediment to the ocean via rivers | 30,000,000 years | 65 |
| 42. Erosion of sediment from continents | 14,000,000 years | 65 |
| • 43. Decay of earth's magnetic field | 10,000 years | 66 |
| 44. Efflux of oil from traps by fluid pressure | 10,000-100,000 years | 58 |
| 45. Formation of radiogenic lead by neutron capture | too small to measure | 58 |
| 46. Formation of radiogenic strontium by neutron capture | too small to measure | 58 |
| 47. Decay of natural remanent paleomagnetism | 100,000 years | 58 |
| • 48. Decay of C-14 in pre-Cambrian wood | 4,000 years | 58 |
| 49. Decay of uranium with initial lead | too small to measure | 67 |

| | | |
|--|------------------------------|-------|
| 50. Decay of potassium with entrapped argon | too small to measure | 67 |
| 51. Influx of juvenile water to oceans | 340,000,000 years | 68 |
| 52. Influx of magma from mantle to form crust | 500,000,000 years | 68 |
| • 53. Growth of active coral reefs | 10,000 years | 68 |
| • 54. Growth of oldest living part of biosphere | 5,000 years | 68 |
| • 55. Origin of human civilizations | 5,000 years | 68 |
| • 56. Formation of river deltas | 5,000 years | 69 |
| • 57. Submarine oil seepage into oceans | 50,000,000 years | 70 |
| 58. Decay of natural plutonium | 80,000,000 years | 71 |
| 59. Decay of lines of galaxies | 10,000,000 years | 72 |
| 60. Expanding of interstellar gas | 60,000,000 years | 73 |
| 61. Formation of Carbon 14 on meteorites | 100,000 years | 74 |
| • 62. Decay of short-period comets | 10,000 years | 75 |
| 63. Decay of long-period comets | 1,000,000 years | 76 |
| 64. Influx of small particles to the sun | 83,000 years | 76 |
| 65. Maximum life of meteor showers | 5,000,000 years | 76 |
| • 66. Accumulation of dust on the moon | 200,000 years | 76 |
| 67. Deceleration of earth by tidal function | 500,000,000 years | 77 |
| 68. Cooling of earth by heat efflux | 24,000,000 years | 77 |
| 69. Accumulation of calcareous ooze on sea floor | 5,000,000 years | 78 |
| 70. Escape of high-velocity stars from globular clusters | much less than billion years | 80 |
| 71. Rotation of spiral galaxies | 200,000,000 years | 99 |
| • 72. Accumulation of peat in peat bogs | 8,000 years | 81 |
| • 73. Accumulation of sediments for sedimentary rocks | 20,000 years | 81 |
| 74. Lithification of sediments to form sedimentary rocks | 20,000 years | 81 |
| 75. Instability of rings of Saturn | 1,000,000 years | 76 |
| 76. Escape of methane from Titan | 20,000,000 years | 76 |
| 77. Efflux of igneous rocks | 500,000,000 years | 62 |
| • 78. Top soil | 6,000-25,000 years | 83-84 |
| 79. Solar wind gases in moon rocks | 1,000-10,000 years | 85-86 |
| • 80. Growth of stalactites and stalagmites | tens of 1,000 of years | 88-90 |

References


1. Staden, A., *Science is a Sacred Cow*, E.P. Dutton & Co., Inc., New York, 1950.
2. Morris, H.M., *The Twilight of Evolution*, Baker Book House, Grand Rapids, Michigan, 1963.
3. Clark, R.E.D., *Darwin: Before and After*, Moody Press, Chicago, 1966.
4. Morris, H.M., *Evolution and the Modern Christian*, Presbyterian and Reformed Publishing Co., Philadelphia, Pennsylvania, 1967.
5. *Handbook for Students — Evolution: Science Falsely So-Called*, International Christian Crusade, 205 Yonge St., Room 31, Toronto, 1, Ontario, Canada, 1970.
6. Koltz, J.W., *Genes, Genesis and Evolution*, Concordia Publishing House, 1955.
7. Koltz, J.W., *Darwin, Evolution and Creation*, Edited by Paul Zimmerman, Concordia Publishing House, 1959.
8. Schutzenberger, M.P., "Algorithms and Neo-Darwinian Theory of Evolution" in *Mathematical Challenge to the Neo-Darwinian Interpretation of Evolution*, Edited by Moorhead, P.S., and Kaplan, M.M., Wistar Institute Press, Philadelphia, Pennsylvania, 1967.
9. Eden, M., "Inadequacies of Neo-Darwinian Evolution as a Scientific Theory" (same book as Ref. 8 above).
10. Morris, H., *The Bible and Modern Science*, Moody Press, Chicago, 1968.
11. Collected Articles in *Bible-Science Newsletter* (Monthly) Box 1016, Caldwell, Idaho, September 1963-present (subscription \$1.50/year).
12. Collected Articles in *Creation Research Society Quarterly*, 2717 Cranbrook Rd., Ann Arbor, Michigan, 1963 — present (subscription \$10/year to non-members).
13. Davidheiser, B., *Evolution and Christian Faith*, Presbyterian and Reformed Pub. Co., Philadelphia, 1969.
14. Gish, D.T., *Evolution, The Fossils Say No*, Institute for Creation Research, Christian Heritage College, 2716 Madison Avenue, San Diego, California, 1972.
15. Morris, H.M. and Whitcomb, J.C., *The Genesis Flood*, Presbyterian and Reformed Pub. Co., 1961.
16. Gish, D.T., *Speculations and Experiments Related to Theories on the Origin of Life: A Critique*, Institute for Creation Research, Christian Heritage College, 2716 Madison Ave., San Diego, California, 1972.
17. Burdick, C. and Chittick, D., editors, *The Creation Alternative*, Bible-Science Association, Box 1016, Caldwell, Idaho, 1970.
18. *Biology: A Search for Order in Complexity*, Edited by John N. Moore and Harold S. Slusher, Zondervan Pub. Co., Grand Rapids, Michigan, 1970.

19. White, A.J., "Uniformitarianism, Probability and Evolution," *Creation Research Society Quarterly*, Vol. 9, No. 1, June 1972, p. 32-37.
20. Kuhn, T.S., *The Structure of Scientific Revolutions*, Second Edition, The University of Chicago Press, Chicago, 1970.
21. Coppedge, J.F., *Evolution: Possible or Impossible*, Zondervan Publishing House, Grand Rapids, Michigan, 1973.
22. Standen, A., *Science is a Sacred Cow*, pp. 60-70, E.P. Dutton & Co., Inc., New York, 1950.
23. Clark, R.E.D., *Darwin: Before and After*, pp. 15-16, Moody Press, Chicago, 1966.
24. Vance, B.B. and Miller, D.F., *Biology for You*, p. 580, Lippincott Co., 1950.
25. Savage, J.M., *Evolution*, Hoit, Rinehart and Winston, New York, 1965.
26. Fairbairn, J.W., *Nature*, "Correspondence," p. 225, Vol. 241, January 19, 1973.
27. Hayward, A.T.J., *Nature*, "Correspondence," p. 557, Vol. 240, December 29, 1972.
28. Hearst, Wm. Randolph, Jr., *The Herald Examiner*, "The Editor's Report," Los Angeles, p. A-4, November 14, 1971.
29. Dyson, Freeman J., "Energy in the Universe", *Scientific American*, Vol. 224, p. 52, September 1971.
30. Shannon, C.E., *Bell System Tech. J.*, Vol. 27, p. 379 and p. 623 (1948), Reprinted: C.E. Shannon and W. Weaver, *The Mathematical Theory of Communication*, University of Illinois Press, Urbana, 1949.
31. Blum, H.F., *Time's Arrow and Evolution*, p. 14 and p. 119, Princeton University Press, 1962.
32. Prigogine, I., Nicholis, G., and Babloyantz, A., "Thermodynamics of Evolution," *Physics Today*, Vol. 26 (11,12), p. 23 and p. 38, 1972.
33. Hull, D.E., "Thermodynamics and Kinetics of Spontaneous Generation," *Nature*, Vol. 186, p. 693, 1960.
34. Williams, E.L., "Resistance of Living Organisms to the Second Law of Thermodynamics Irreversible Processes, Open Systems, Creation and Evolution," *Creation Research Society Quarterly*, Vol. 8, No. 2, pp. 117-126, 1971.
35. Davidson, C.F., "Geochemical Aspects of Atmospheric Evolution," *Proc. Nat. Acad. Sci.*, Vol. 53, p. 1194, 1965.
36. Brinkman, R.T., *J. Geophys. Res.*, Vol. 74, p. 5355, 1969.
37. Howe, George, "Origin of Life," *Bible-Science Newsletter*, p. 3, December 1970.
38. Jaffe, Louis S., "The Biological Effects of Ozone on Man and Animals," *Amer. Ind. Hygiene Assoc. J.*, pp. 267-276, May-June 1967.
39. dy Nouy, L., *Human Destiny*, Longmans, Green & Co., p. 34, 1947.
40. Coffin, H.G., *Creation: Accident & Design*, Review and Herald, Washington, D.C., p. 393, 1969.
41. Morowitz, H.J., *Energy Flow in Biology*, pp. 66-67, Academic Press, New York, 1968.
42. Holroyd, H.B., "Darwinism is Physical and Mathematical Nonsense," *Creation Research Society Quarterly*, Vol. 9, No. 1, p. 13, June 1972.

43. Clark, A.H., *The New Evolution, Zoogehesis*, p. 129, Williams and Wilkins, Baltimore, 1930.
44. Darwin, C., *Origin of Species*, pp. 80, 157, J.M. Dent & Sons, 1956.
45. Koltz, J.W., *Genes, Genesis and Evolution*, p. 208, Concordia Publishing House, St. Louis, 1955.
46. Simpson, G., *The History of Life in Evolution After Darwin*, pp. 143-144, University of Chicago Press, Chicago, 1960.
47. *Biological Science: Molecules-Man — Biological Science Curriculum Study*, Blue Version, Houghton Mifflin Co., Boston, 1968.
48. Gish, D.T., *Evolution, The Fossils Say No*, ICR Publishing Co., San Diego, 1973.
49. Leakey, R.E.F., "Further Evidence of Lower Pleistocene Hominids from East Rudolf North Kenya," *Nature*, Vol. 231, p. 241, 1971.
50. Leakey, R.E.F., *National Geographic*, Vol. 143, p. 819, 1973.
51. *Creation Study Guides*, Vol. 1, No. 2, Bible-Science Association, Caldwell, Idaho, 1973.
52. *Ibid.*, Vol. 1., No. 1.
53. Huxley, J., *Evolution in Action*, p. 45, Harper and Bros., 1953.
54. Howe, G.F., *Unpublished Notes*, 1972.
55. Goldschmidt, R.B., "Evolution As Viewed by One Geneticist," *American Scientist*, Vol. 40, pp. 84-98, 1952.
56. Morris, H.M., "The Young Earth," ICR Impact Series No. 17, *ICR Acts & Facts*, San Diego, Vol. 3, No. 8, September 1974.
57. Cook, M.A., "Where is the Earth's Radiogenic vHelium," *Nature*, Vol. 179, p. 213, January 26, 1957.
58. Cook, M.A., *Prehistory and Earth Models*, Max Parrish, London, 1966.
59. Petterson, H., "Cosmic Spherules and Meteoric Dust," *Scientific American*, Vol. 202, p. 132, February 1960.
60. Cook, M.A., "Carbon-14 and the Age of the Atmosphere," *Creation Research Society Quarterly*, Vol. 7, No. 1, pp. 53-56, 1970.
61. Whitelaw, R.L., "Time, Life and History of 15,000 Radiocarbon Dates," *Creation Research Society Quarterly*, Vol. 7, No. 1, pp. 56-71, 1970.
62. Morris, Henry M. (Ed.), *Scientific Creationism for Public Schools*, Institute for Creation Research, San Diego, 1974.
63. Riley, J.P. and Skirrow, G. (Eds.), *Chemical Oceanography*, Academic Press, Vol. 1, p. 164, 1965. See also Harold Camping, "Let the Ocean Speak," *Creation Research Society Quarterly*, Vol. 11, pp. 39-45, June 1974.
64. Whitney, Dudley J., *The Face of the Deep*, Vantage Press, New York, 1955.
65. Nevins, Stuart E., "Evolution: The Ocean Says No," ICR Impact Series No. 8, *ICR Acts & Facts*, Vol. 2, No. 8, October 1973.
66. Barnes, Thomas G., *Origin and Destiny of the Earth's Magnetic Field*, Institute for Creation Research, San Diego, 1973.
67. Slusher, Harold S., *Critique for Radiometric Dating*, Institute for Creation Research, San Diego, 1973.
68. Whitcomb, John C., Jr., and Morris, Henry M., *The Genesis Flood*, Presbyterian and Reformed, Philadelphia, 1961.

69. Allen, Benjamin F., "The Geologic Age of the Mississippi River," *Creation Research Society Quarterly*, Vol. 9, pp. 96-114, September 1972.
70. Wilson, R.D., et.al., "Natural Marine Oil Seepage," *Science*, Vol. 184, pp. 857-865, May 24, 1974.
71. "Natural Plutonium," *Chemical and Engineering News*, September 20, 1971.
72. Arp, Halton, "Observational Paradoxes in Extragalactic Astronomy," *Science*, Vol. 174, pp. 1189-1200, December 17, 1971.
73. Hughes, V.A. and Routhledge, D., "An Expanding Ring of Interstellar Gas with Center Close to the Sun," *Astronomical Journal*, Vol. 77, No. 3, pp. 210-214, 1972.
74. Boekl, R.S., "Search for Carbon 14 in Tektites," *Journal of Geophysical Research*, Vol. 77, No. 2, pp. 267-268, 1972.
75. Slusher, Harold S., "Some Astronomical Evidences for a Youthful Solar System," *Creation Research Society Quarterly*, Vol. 8, pp. 55-57, June 1971.
76. Slusher, Harold S., *Age of the Earth from some Astronomical Indicators*, Unpublished manuscript.
77. Barnes T.G., "Physics, A Challenge to Geologic Time," ICR Impact Series 16, *ICR Acts & Facts*, Institute for Creation Research, July 1974.
78. Ewing, Maurice, Ewing, J.I., and Talwan, M., "Sediment Distribution in the Oceans-Mid-Atlantic Ridge," *Bulletin of the Geological Society of America*, Vol. 75, pp. 17-36, January 1964.
79. Nevins, Stuart E., *How Old is the Ocean?*, Unpublished manuscript.
80. Slusher, H.S., "Clues Regarding the Age of the Universe," ICR Impact Series No. 19, *ICR Acts & Facts*, Institute for Creation Research, Vol. 3, No. 10, November 1975.
81. Morris, Henry M., Unpublished calculations.
82. Faul, H., *Nuclear Geology*, John Wiley, New York, 1974.
83. Mickey, A., *Man and Soil*, International Harvester Co., p. 17, 1945.
84. Taylor, J.C., *Lawns*, p. 5, Ontario Dept. of Agriculture Publications, No. 448.
85. Cook, M.A., "Rare Gas Absorption on Solids of the Lunar Regolith," *Journal of Colloid and Interface Science*, Vol. 38, No. 1, p. 18, January 1972.
86. Heymann, D., "Inert Gases in Lunar Samples," *Science*, Vol. 167, pp. 555-558, January 30, 1970.
87. Hubbert, M.K. and Rubey, W.W., "Role of Fluid Pressure in Mechanics of Overthrusting Faulting," *Bull. Geol. Soc. Am.*, Vol. 70, pp. 115-206, 1959.
88. Whitcomb, J.C., *The World That Perished*, p. 114-115, Baker Book House, Grand Rapids, Michigan, 1973.
89. Keithley, W.E., "Note on Stalactite Formation," *Creation Research Society Quarterly*, Vol. 8, No. 3, p. 188, 1971.
90. Sutherland, M., "Carlsbad Caverns in Color," p. 442, *National Geograph*, CIV:4, October 1953.
91. Lyttleton, R.A., *Mysteries of the Solar System*, Clarendon Press, Oxford,

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