

Has God Spoken



5th edition
UPDATED

A.O. Schnabel

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A. O. Schnabel



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ABOUT THE AUTHOR

Arnold O. Schnabel continues to maintain a strong interest in researching evidence that supports the Bible's claim of inspiration. This began when he became a Christian at the North Amarillo Church of Christ in 1951 while serving in the U.S. Air Force at Amarillo, Texas. He understood that true faith can only come from the Word of God, and therefore one needs the support of knowing that the biblical text was inspired (God-breathed) as it came to the prophets and apostles two thousand to four thousand years ago.

After the Korean War, Schnabel interrupted his studies in engineering to attend Freed-Hardeman University for two years as a special student in Biblical Studies so that he might be better equipped to serve in the Lord's Kingdom. He then completed his degree in aeronautical engineering at Auburn University and in 1958 moved with his wife, Sue, and their first child to Seattle, Washington, to begin work with the Boeing Aircraft Company in its Research and Development Department.

At Boeing, Schnabel's fellow engineers and scientists continually challenged him as to why he believed in the Bible's inspiration. Not finding any material on inspiration available that was particularly suitable for scientists or engineers, which meant that it had to be seen or touched, he promised them he would provide it. Using his dual educational background, he spent six months researching and matching the Biblical text to modern scientific discoveries. This evidence was then discussed during the daily lunch break with about forty coworkers and thus was the beginning of a lifetime work.

For several years, Schnabel personally published the material in a book bearing the name of this book. Later the Bible Science Association printed his book, and after that the Creation-Life Publishers, Inc.,

of The Institute for Creation Research printed the book for several more years. This is the fifth edition, with more than fifty thousand copies of earlier editions already in print. The book, or portions thereof, has been printed in Japanese, Korean, German, and Russian. This edition of *Has God Spoken?* has been updated and enlarged to include the latest material presented in Arnold Schnabel's lecture series.

For forty years, Schnabel has been invited to speak to hundreds of churches, schools, civic organizations, and universities in this country and overseas on the subject of Biblical evidence. He has been a lecturer for both the Bible Science Association and the Creation Research Society. On several occasions, he has labored with churches as a gospel preacher and teacher. He has had debates at universities, over the radio, and at public forums. To get the message of the Bible out, he hosted a daily talk show, "Ask Your Preacher," for eleven years while living in Portland, Oregon, and later Tampa, Florida. To support his family, he has had numerous businesses. These permitted him the freedom to travel so that he could lecture on the material contained in this book. He views this book as a never-ending research project that can be used to support one's faith in God's inspiration of His Word, the Bible.

ACKNOWLEDGMENTS

This book would never have been written without the desire to serve my God, which comes from my grateful heart for all He has done for me and promises yet to do. I owe a debt of gratitude to my wife, Sue, and my four children who, along with countless Christians over the past years, have continued to encourage me to republish this material. I appreciate the many churches of Christ that have used this information as a teaching tool in defense of the truth concerning the Bible's inspiration.

PREFACE

Knowledge of the evidences of Christianity is essential to each of God's children. Without knowledge of the reasonable credentials of the Gospel, our faith will lack conviction and reality, and our ministry will not carry the necessary zeal and diligence. As small children we accept unquestioningly our parents' faith, as do young children of all faiths. Now, our God demands that we be ready always to give answer to the unbeliever that asks us a reason concerning our hope of eternal life (1 Pet. 3:15).

Too few Christians realize that the burden of proof falls upon the one who states, "There is a God, and the Bible is His revelation of Himself to us." The denial of the unbelievers cannot be proved, but in reality the challenge is for the believer to prove his statement. God has not handicapped this generation but has given us ample evidence of His existence, His nature, and His speaking to us through men in the past. The purpose of this study therefore is to accredit the testimony of the writers of the Bible. A person's faith can be founded on the fact that the written record is a reliable and faithful witness, both historically and scientifically. The integrity of the Bible stands on the proven integrity of its writers.

INTRODUCTION

IF there is a God who is supreme over our universe, and IF the Bible is a revelation from that God, then there is one essential that must be inherent within that revelation. It must be constituted solely of TRUTHS! It is an absolute necessity, then, that statements of Bible writers, when prophesying concerning national events, or when the writings relate to physical laws of this universe, all must coincide perfectly with accepted facts of science and history, but not necessarily theories. Furthermore, Bible statements must do this regardless of the accepted theories and level of scientific knowledge of the age in which they were written.

This work has been written to demonstrate that between the observations of science and history, there exists a harmony with the simple and direct interpretation of the Bible narrative such as would be expected of a book written by the Creator of the physical world. If you, the reader, can be shown proof of this statement, then truly you have seen beyond any doubt a miracle in this scientific age as unexplainable as any recorded in the Bible. It is beyond comprehension that men who lived two thousand to four thousand years ago could, without this age's scientific instruments, arrive at the same knowledge as the men of science in the last three hundred years.

Modern instruments of research make possible our great advancements in science, so it is machine technology that allows us to broaden our knowledge beyond that of our forefathers. Leeuwenhoek's invention of the microscope in 1676, the use of shockwaves in the study of the ocean floor, the world's largest radio telescope commencing operation in November of 1963, these and countless other tools have provided discoveries of the universe's secrets that otherwise would have been impossible for the unaided human mind to search out.

As evidence of their Divine Guidance, the writers of the Bible have revealed scientific truths in nonscientific terms. These truths, which were considered as Biblical errors for centuries by the skeptic, have come to light in recent times only through painstaking and costly research. Without the development of modern research instruments and programs, confirming these Biblical statements to be true and factual would be difficult.

Moreover, a study of the Bible in our day, when science and materialism have become common idols, shows no reflection of scientific error. This is the second half of inspiration's miracle. Thus, not only does the Bible predescribe later scientific discoveries and historical events, but it does so without allowing entrance of any erroneous thought or concept that was commonly believed at the time the prophet wrote.

IS God the unseen author of the Bible? Let us create a simple parallel problem of ownership. We could tell of an old magnificent home that had stood unclaimed as long as any local resident could remember. One day a man came to the town and claimed the house to be his. Since no records existed in writing and no residents could testify as to ownership, many disputed his claim. To verify his ownership, the man said he had been the builder and would offer as evidence to this fact some of the house's internal construction secrets. He told of a cement trowel that had fallen into the wet cement foundation and was entombed at one corner, hidden floor joists that were made of 2×8s instead of the standard 2×6s, and over two dozen more unseen facts of the construction. If the house was torn open enough to reveal these statements to be true, would you as the local judge, based on this evidence, declare the house to be his? Scientists are examining the universe and uncovering the secrets of its construction. We will compare these modern discoveries with statements from the prescientific era book, the Bible, that claims to be authored by the universe's builder, Jehovah.

Now the question confronting us is, by what means did those ancient writers, none of who could be considered scientists or to have had adequate research tools, acquire such an amazingly accurate knowledge of certain historical events and recent major scientific discoveries? This study is intended to bring to your attention the facts in their writings. The answer to the question "By what means?" is for you, the reader, to ponder.

Our method of study will be to first read and analyze an ancient Bible writer's statement, then look at the historical record of information pertaining to that event or scientific fact, all in chronological order. The reader should note that all dates given are only approximate, as determined by reliable authorities. The New American Standard Bible, printed in 1960, is used because of its modern language and its well-known textual accuracy.

1

ASTRONOMY



Astronomy is one of the oldest sciences in man's history. Paradoxically, little truth was known of our universe until the twentieth century, as is evident in the following information. To begin this comparative study in astronomy, let us consider a few basic facts concerning this planet we live on.

THE EARTH IS SPHERICAL

BIBLE WRITERS

1033–975 B.C.

Solomon wrote, "He inscribed a circle on the face of the deep" (Prov. 8:27).

745–695 B.C.

"It is He that sitteth above the circle of the earth" (Isa. 40:22).

ANALYSIS: The Hebrew word *khug* is translated "circle." A more exact connotation would be "sphericity" or "roundness." The use of the word "deep" refers to the deep bodies of water, similar to our word "depth." The ancient writers use the Hebrew word *erets* for "earth" in two senses. One use denotes the entire world, while the more common usage was limited to only the dry land portion as used in Genesis 1:10.

FACT: The earth, including the ocean face or water lines, was declared to be "rounded" or "spherical."

HISTORY OF SCIENCE

384–322 B.C.

In every civilization other than Israel, the unearthed records show that man taught the earth to be flat. The first arguments set forth for a spherical

earth were by the famous Greek philosopher, Aristotle. These arguments were that ships disappear over the horizon and that a circular shape could be seen on the moon during an eclipse. Disappointingly, this evidence convinced few people other than Aristotle's personal students.

200 B.C.

When the Romans became the world rulers, they "did not continue the scientific attitude of the Greeks. . . . They returned to the disk shaped earth of the early Greeks, and the Roman Orbis Terrarium became the standard of the world for 13 centuries."¹

A.D. 1520

The common man held that the earth was flat until "the introduction of the compass and improved sailing vessels made possible the voyages of Columbus, Magellan, and others. These great discoveries caused a revolution in map making,"² which finally brought general acceptance of the fact that the earth is spherical.

A.D. 1800

"At the end of the 17th century, the sextant, telescope, theodolite, the plane table, the barometer, and accurate pendulum clocks were available for land measurements."³

THE EARTH REVOLVES DAILY BIBLE WRITERS

2000 B.C.

"Have you ever in your life commanded the morning, and caused the dawn to know its place. . . . It is changed like clay under the seal" (Job 38:12-14a).

1015 B.C.

Maschil's Psalm speaks of King David, "His descendants shall endure forever, and his throne as the sun before me. It shall be established

1. Erwin Raisz, "Map," *Encyclopedia Americana*, Vol. 18, 1957 ed., p. 258a.

2. *Ibid.*

3. *Ibid.*



Figure 1.1 Circle of the Earth

forever like the moon, and the witness in the sky is faithful” (Pss. 89:36-37).

ANALYSIS: The Hebrew word *changed* in Job 38:14 carries the meaning “changed by turning.” Signature rings were commonly used to press seals in ancient days. Today’s museums show they generally were constructed of an engraved round semiprecious stone mounted on a ring. The engraved stone, called a signet, would be pressed into damp clay, then the clay turned to receive an impression of concentric circles. Each man’s ring contained a stone of different shape and therefore became his personal and unmistakable signature. Thousands of variations were possible, as with today’s typical house or car key. The

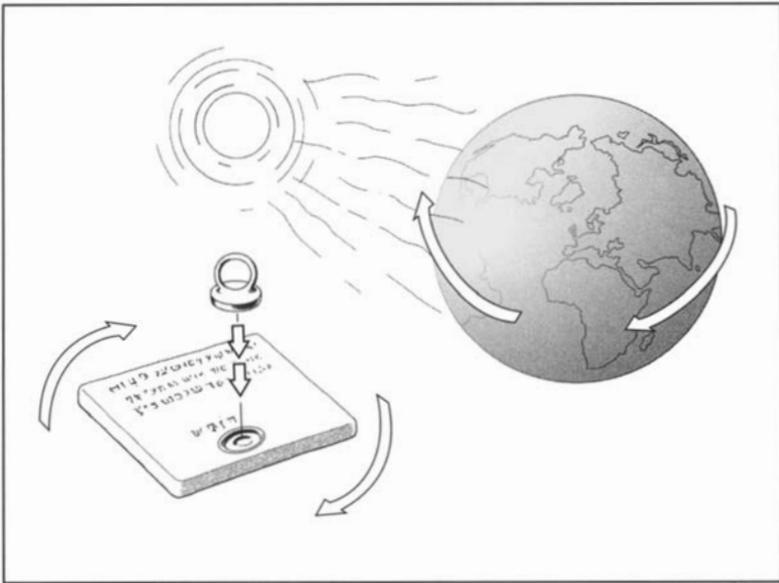


Figure 1.2 Rotating Clay Tablet Demonstrates Earth's Rotation

sun's apparent motion at daybreak, as appears to an observer on earth, is explained using this example. Thus God's illustration to Job is: The ring (sun) that makes the impression on the clay tablet (daybreak) is held in a fixed position, and the tablet (earth) that receives the impression (daybreak) is rotated completely around so that the ring (sun) appears in its original position once again. Job paralleled the break of day to the impression left by the signet ring in the clay. Note the following comparison in Figure 1.2.

Hebrew poetry is composed of two parallel verses that have a direct relationship to each other. The second verse usually expresses the same thought as the first, using different words. Thus, Maschil calls the moon the faithful witness in the sky. The moon has always witnessed to man that which it observes and man cannot—namely, sunlight after sunset. The moon reveals the location of the sun at night by reflecting the sun's light.

FACT: Job wrote that the sun, which appears at daybreak and seems to move through our sky, is actually stationary. Instead, it is our earth beneath

the sun that is rotating. The psalm writer, Maschil, recorded that the moon witnessed, through reflection, the sun's position to man at night.

HISTORY OF SCIENCE

384–322 B.C.

Ancient civilizations through normal visual observation concluded that the sun did move across our sky, thus the terms “sunrise” and “sunset.” They conjectured many theories as to where the sun disappeared to at night and how it reappeared the next day at the opposite side of the sky. Aristotle hypothesized that the earth revolves around the sun as a body in the solar system.

A.D. 146–1543

Contrary to the earlier theory of Aristotle, Claudius Ptolemy devised a planetary system that was accepted until the sixteenth century. He theorized that there was an immovable earth at the center of the universe with a *primum mobile*, which carried all the celestial bodies and rotated once a day around the earth.

A.D. 1543

The Copernicus System, published in 1543 by Nicolaus Copernicus, explained the apparent motion of the heavenly bodies as being due to the earth's daily rotation and annual circling around the sun. The system proposed by Copernicus required such a reversal of all contemporary scientific and religious thought as to man's place in the physical universe that violent opposition arose and even learned men were slow to accept its possibility.⁴

A.D. 1851

The actual daily rotation of the earth ultimately became demonstrated by the application of physical laws discovered concerning the movement of pendulums. “The first scientific proof of the rotation of the earth, which admits of no argument, is the device invented by Jean Leon Foucault. In 1851 he suspended a long pendulum from the inte-

4. Charles P. Olivier, “Copernican System,” *Encyclopedia Americana*, Vol. 7, 1957 ed., p. 649.

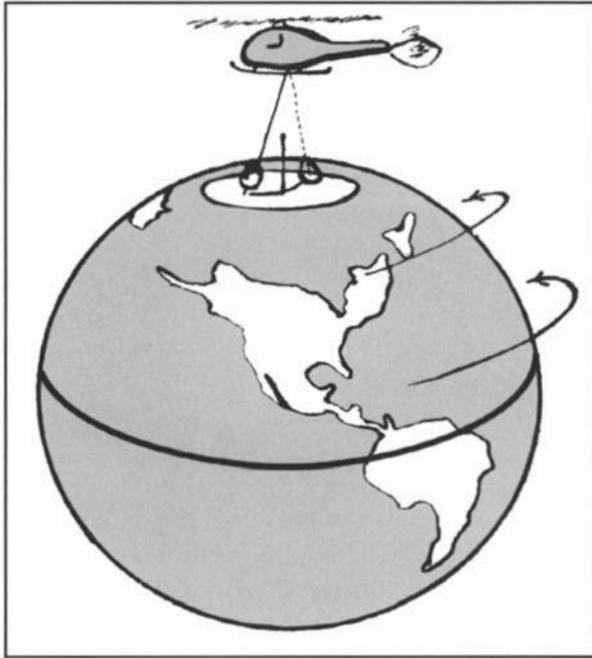


Figure 1.3 Pendulum Illustration

rior of the dome of the pantheon in Paris.”⁵ It was simply a heavy iron ball attached to the end of a long thin cable. The length was adjusted so that as the ball swung across sand covering a circular rail at the base of the huge dome, it would leave a mark in the ring of sand. The ball was drawn to one side and the pendulum’s movement was started, allowing the ball to swing across the rail. A thin wire attached to the underside of the ball made a mark in the sand on each side of the ring as it swung across it. The direction of swing appeared to continually change, actually showing the earth’s rotation beneath the swinging pendulum. This discovery is considered the most important in man’s history and is represented by a model of Foucault’s device in the rotunda of the United Nations building in New York City.

5. Alexander F. Morrison Planetarium, “Our Spinning Earth,” California Academy of Sciences, 1965, p. 3.

Foucault pointed out that in all the laws of nature there was no force acting directly upon his pendulum to make it change its direction of swing. Then the only answer there could be was that the earth must have been turning beneath the pendulum. It is easy to imagine how the earth could turn beneath the swinging pendulum if the experiment shown in Figure 1.3 could be performed over the North or South Pole.

THE EARTH IS NOT SUPPORTED

BIBLE WRITERS

2000 B.C.

“He . . . hangs the earth on nothing” (Job 26:7).

ANALYSIS: A clear true statement in unscientific terms.

FACT: Job wrote that the earth is not physically supported.

HISTORY OF SCIENCE

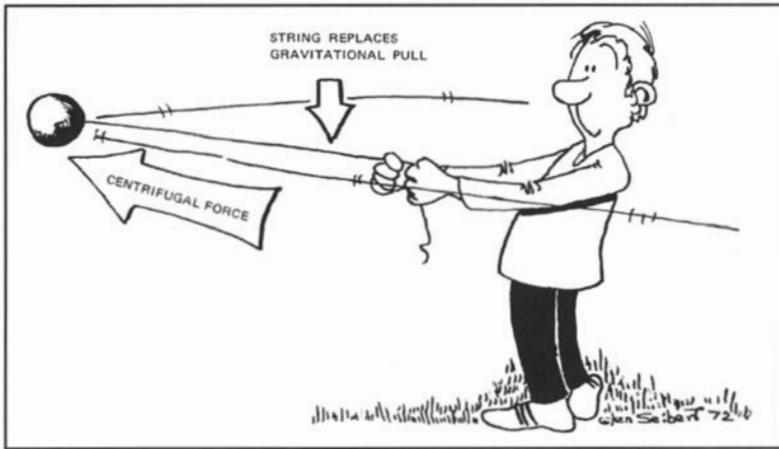
Pre-A.D. 1543

As previously noted, the world’s scholars and scientists, with the exception of a few early Greeks, believed in the Ptolemy system that the earth was rigidly supported and all movement was in the heavens.

A.D. 1687

The invention of the telescope in 1608, by a Dutch optician, Hans Lipershey, gave scientists the ultimate tool that would unlock the secrets of our earth’s position in space.

In succeeding years the development of the telescope led Sir Isaac Newton to discover that the earth’s weight is not supported but, rather, is suspended in its orbit, the centrifugal force exerted by rotation around the sun being balanced by gravitational attraction to the sun. Newton published this finding in his *Principia* in 1687. In it he presented, for the first time, what now is referred to as the Law of Universal Gravitation. To understand the magnitude of the problem, the earth weighs six billion trillion (6×10^{21}) tons. To replace the gravitational pull of our sun, it would take the strength of a steel cable eight thousand miles in diameter.



1.4 Example Of Similar Forces On Ball

A.D. 1839

The parallactic orbit of stars was discovered. This is a shift in the apparent direction of a heavenly body caused by a change in the relative position of the observer that gives him a three-dimensional view, thus it was seen that the earth was not mechanically supported.

It was also noted that there were small annual displacements in the apparent position of many fixed stars. This was seen as proof of earth's annual orbit around the sun.

A.D. 1930

In 1666, Sir Isaac Newton was the first to demonstrate that a prism can split light into color spectrum. This led to the later development of the spectroscope, which became a practical scientific instrument in 1859. The modern telescope combined with the spectroscope in 1930 was used to further prove the daily rotation of the earth and its annual revolution about the sun. "We now have several absolute proofs lacking before the days of telescope and spectroscopes."⁶

Today's scientists are revealing wonders of the vast universe to us through development of new and powerful tools. Bearing in mind

6. Charles P. Olivier, "Copernican System," p. 649.

that astronomers were given their first significant tool less than four centuries ago, let us now turn our attention from this planet to the discoveries of the surrounding heavens.

THE UNIVERSE IS A CONTINUOUSLY SPREADING EXPANSE

BIBLE WRITERS

1491–1451 B.C.

“And God called the expanse heaven” (Gen. 1:8). In verses 14–19 it is recorded that the sun and stars were in the expanse of the heavens.

628–588 B.C.

“Thus says the Lord, If the heavens above can be measured, . . . then I will also cast off all the offspring of Israel” (Jer. 31:37).

ANALYSIS: The writers of the Bible comprehended three heavens. The first was the atmosphere common to life, clouds, and flying creatures; the second was the starry firmament; and the third was the place of God’s throne. These ancient writers had much to say about this second heaven. Therefore, we shall check their knowledge against the proven facts that man’s recent inventions have revealed.

What did Moses mean by the word “expanse” or “firmament” as relating to the heavens? The Hebrew word is *raqiya* and derives its root meaning from the “spreading out” of something being pounded, such as a lump of metal as it is continuously beaten with a metal smith’s hammer into a thin sheet. Thus, firmament is defined as a “spreading out expanse” and carries the meaning of a continuous action with the implication that no limit has yet been reached. This word is used only in connection with “second heaven” and never refers to the area of God’s throne. By applying the literal meaning to the above passage, we see Moses declaring that the spreading out expanse is called “heaven” and contains the sun, moon, and stars.

FACT: Moses stated that the visible heaven is made up of a continuously spreading expanse, while Jeremiah referred to the fact that men cannot complete the measurement of it.

HISTORY OF SCIENCE Pre-A.D. 1800

Until the aid of modern instruments provided man with the means of measuring the heavens, all mankind's theories and philosophical thoughts considered the universe as finite and limited. In many instances whole civilizations believed that the heavenly bodies were close enough to permit gods to live on them and visually observe happenings on earth. The more observant men thought in terms of hundreds of thousands of miles. Many observed, as did Job, "[B]ehold the height of the stars, how high they are!" (Job 22:12).

"In looking back to former ideas of the universe and comparing them with those current today, one is struck with the fact that the supposed size of the universe has increased almost incredibly, not only since the days of the Greek philosophers, but during the past generation."⁷

A.D. 1835-1901

The leading American astronomer of his time, Simon Newcomb, believed the most distant star only 3,260 light-years away. A light-year is approximately six trillion (6×10^{12}) miles and is the distance over which light can travel in a year's time. To grasp the concept, one light-year can be related to the following: The earth's equator is approximately 25,000 miles in diameter, and light will travel around it seven times in one second. The distance to the sun is about thirty-seven hundred times the distance around the earth, and therefore it takes sunlight five hundred seconds to reach us. It would take sixty-six hundred of these earth-to-sun units of distance to equal one light-year.

A.D. 1917

In 1917, Albert Einstein wrote his General Theory of Relativity in which he conceived the universe as finite, unbounded, and static, a premise that was disproved ten years later.

At Lick Observatory, Heber D. Curtise first discovered spiral nebulae (nebulae are stellar or space bodies and gases). These appear to the naked eye to be only a star in our galaxy, but when Curtise turned

7. Charles P. Olivier, "Universe," *Encyclopedia Americana*, Vol. 27, 1957 ed., p. 573.

a powerful telescope on one it proved to be composed of billions of suns comprising a flat spiral disk shape.

A.D. 1924

Until 1924 it was not known whether these spiral nebulae were inside or outside our galaxy. Edwin P. Hubble, using the Mount Wilson reflector, proved these to be outside our galaxy and to be galaxies or island universes comparable to our own Milky Way.

In 1928, Edwin Hubble and Milton Humason used the spectroscope in analyzing starlight. Together they discovered the phenomenon called Hubble's Law, which associates the redshift of a star's light spectrum with its velocity as it travels away from the earth.

A.D. 1950

In 1948, after twenty years of planning and construction, the two hundred-inch lens telescope at Mount Palomar reached out two billion light-years into space, disclosing two important facts. First, there is a homogeneous distribution of nebula throughout space. The universe consisted of many galaxies, trillions of them. Secondly, all these galaxies were moving away from us—the further off the nebula, the faster the velocity. This latter development is shown by a definite redshift in their spectra.

This velocity observation, using the redshift, is accomplished by directing the light of a given nebula into a spectroscope that refracts the light into a color spectrum. The spectrum is composed of light separated according to each color's wavelength, running from the longer wavelengths of red at one end to violet, the shorter waves, at the other. Each element when burned produces light of certain definite wavelengths. These appear in the spectrum as a definite pattern of lines, always at the same place in the spectrum unless the source of light is relatively moving toward or away from the observer. If the source is receding, the pattern of lines for any element will appear farther toward the red than they would if the source were stationary with respect to the observer.

The shifting of the special lines is used extensively to determine the velocities of planets and stars with respect to the earth. Practically all spectra of galaxies have their lines shifted toward the red. These shifts are very great for the more distant galaxies and less for the closer ones. This shift has become commonly known as the redshift. The concept



Figure 1.5 Expand of Heaven

of the expanding universe can be compared to the expanding volume within an inflating balloon and thus proved that the universe is expanding, ending the concept of a limited universe.

THE STARS ARE INNUMERABLE

BIBLE WRITERS

628–588 B.C.

"As the host of heaven cannot be counted, and the sand of the sea cannot be measured" (Jer. 33:22).

A.D. 63

"... as the stars of the heaven in number, and innumerable as the sand which is by the seashore" (Heb. 11:12).

FACT: Both writers contended that the number of stars is as innumerable as are the grains of sand of all the seashores.

HISTORY OF SCIENCE

150 B.C.

Hipparchus taught that there were less than 3,000 stars.

A.D. 150

Ptolemy counted 1,056 stars and claimed the actual number would not exceed 3,000.

A.D. 1608

Galileo used a telescope the first year it was invented and, being the first to discover that there are so many stars, announced that the number was innumerable.

A.D. 1924

Gradually, through the invention of better instruments, the count grew to one hundred billion suns in our galaxy and an estimated trillions of galaxies, of which ours is average. To comprehend the possibility of counting stars, if a man were to count the suns just in our Milky Way galaxy at the rate of two hundred per minute, it would take him one thousand years. Stars exist in galaxies by the billions.

A.D. 2000

Space satellite telescopes have now revealed that clusters are each comprised of billions of galaxies, such as our Milky Way. Innumerable clusters make up uncountable cluster of clusters, which then comprises superclusters. The grains of sand on all the earth's seashores are countless times less than the stars of the heavens. As scientists look farther into the universe, they see larger and larger structures. The largest structures that are being observed cannot be explained by any current theory.⁸

Pause one moment in this study and attempt to comprehend this Creator of the universe that Christians worship. Are not His intelligence and power, as manifested by the stars, beyond comprehension?

8. "How Is the Cosmos Structured?" *Time*, March 6, 1995, pp. 81-85.

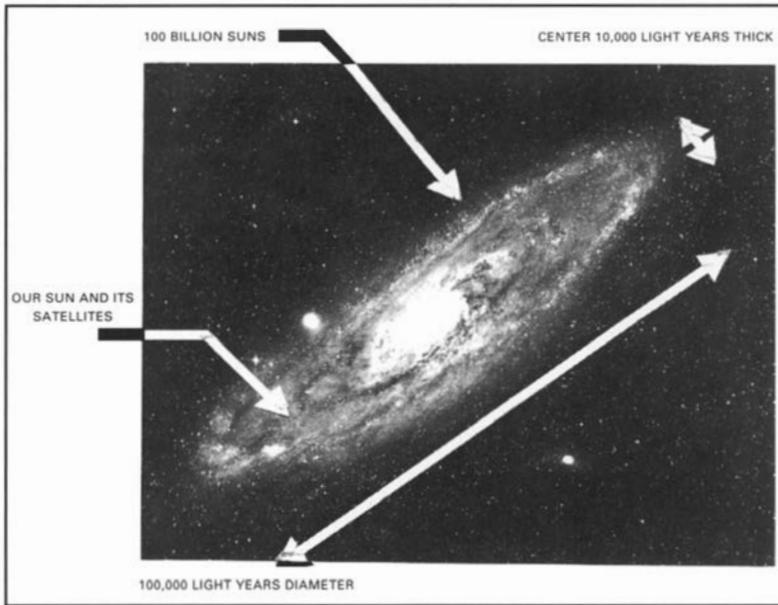


Figure 1.6 Milky Way Galaxy

“Lift up your eyes on high and see who has created these stars, the One who leads forth their host by number He calls them all by name; because of the greatness of His might and the strength of His power not one of them is missing” (Isa. 40:26).

“He counts the number of stars; He gives names to all of them” (Pss. 147:4).

This Divine Being calls Christians His “adopted children” and asks them to speak to him in prayer. As for those who choose not to believe in God, the apostle Paul warned, “For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made, so that they are without excuse” (Rom. 1:20).

THE STARS EMIT SOUND BIBLE WRITERS

2000 B.C.

“The morning stars sang together” (Job 38:7).

ANALYSIS: The Hebrew word for “sang” is *ranan* and pertains to the admittance of a loud creak, shrill, or strenuous sound, such as the sounds emitted by opening a heavy iron gate having dry hinges.

FACT: Job declared that stars emit loud, shrill, strenuous sounds that are audible.

HISTORY OF SCIENCE

A.D. 1940

In an attempt to determine whether stars emit sound, Grote Raber tried to detect radio waves from the sun. His results were negative.

A.D. 1942

Raber tried again with inconclusive results. The same year, U.S. Army scientists were testing secret radar equipment developed for detecting German aircraft. This equipment used a wavelength of 400 to 500 centimeters. Suddenly in February of 1942, the radar sets received extremely high noise so loud they could not be operated. At first it was thought to be a form of German jamming. The direction of the sound was soon traced, however, and was found to have been caused by the activities of a sunspot.

This discovery gave birth to the radio telescope as a research tool after World War II. It is now known that radio waves that enter our atmosphere vary in length from 0.8 centimeters to 17 meters. The natural ear is not designed to hear the shrill sound of the stars.

November 1, 1963

The science of astrophysics is concerned with the mechanics of all nebulae in the universe. In 1963 the world's largest and most powerful radio telescope was set in operation at Arecibo, Puerto Rico. Its 1,000-foot diameter reflector is set within a natural depression in the earth, and with this instrument astronomers have discovered objects in the heavens unlike anything previously observed before.

These are still the subject of space explorations programs. They are starlike in appearance but of tremendous size and emit strong radio signals, and if indications are correct, they shine with the equivalent intensity of a trillion suns. Known as quasars, they are moving away at great speeds and must be near the edge of the known universe. An announcement from Mount Wilson Observatory placed one quasar as the most distant object known. The computed redshift of this quasar indicates a recession of 149,000 miles per second.

The strangest feature of radio astronomy is that the most powerful radio sources cannot be identified optically with anything at all, indicating that radio telescopes might be seeing much farther into space than optical ones.⁹

HEAVENS CONTROLLED BY ORDINANCES BIBLE WRITERS

2000 B.C.

“Do you know the ordinances of the heavens, or fix their rule over the earth?” (Job 38:33).

1015 B.C.

David wrote, “Their line is gone out through all the earth” (Pss. 19:4).

1033–975 B.C.

Solomon stated, “He made firm the skies above” (Prov. 8:28).

628–588 B.C.

“Thus says the Lord, Who gives the fixed order of the moon and stars for light by night” (Jer. 31:35).

ANALYSIS: The word “line” in Psalms 19 is a Hebrew word that refers to literally having “rule” or “measured control,” such as a city’s boundary line.

FACT: These four writers collectively wrote that all heavenly bodies are governed by ordinances. They held that these ordinances were:

9. William Bonner, *The Mystery of the Expanding Universe*, The Macmillan Co., 1964, p. 68.

1. Being "firm" or "hard," unchangeable.
2. Being consistent and harmonious with one another because they are governed by one intelligent source.
3. The heavens physically have a measured control, or "rule," over this planet.

HISTORY OF SCIENCE

700 B.C.

The technical elements of astrology came from Babylon and Egypt. The first known horoscopes are recorded in cuneiform tablets dated 410 B.C. from Egypt, although the technical elements of the twelve houses of the zodiac came from Babylon.¹⁰

A.D. 1687

Until 1687 most assumed that the stars' movements could control and foretell men's acts upon the earth. This pseudoscience of astrology is based on the assumption that the movements of the stars are irregular and not governed by "firm ordinances."

Sir Isaac Newton, in 1687, led the world to acknowledge that all heavenly bodies, including planet earth, are regulated by what he called celestial mechanics. This discovery of the Law of Universal Gravitation was made possible by the development of the telescope, as previously noted. Such men as Claudius Ptolemy not only were astronomers but also indulged in astrology, usually for profit. True science was hindered by such practice and superstition. Ptolemy was typical in that "his scientific investigation in the field of natural astrology was marred by his indulgence in the casting of horoscopes."¹¹

Astrology was popular in Europe until the middle of the seventeenth century. It still flourishes, however, in Asia and Africa and is used as a means of livelihood to many charlatans who prey upon the ignorant people in all countries.

10. George Sarton, *A History of Science*, Harvard University Press, 1959, pp. 164 and 316.

11. Fergus J. Wood, "Ptolemy," *Encyclopedia Americana*, Vol. 22, 1957 ed., p. 753.

A.D. 2002

Note the phenomenal increase of horoscopes in this country. This ancient form of idolatry is found in more than seventeen hundred daily newspapers, numerous magazines, and daily radio broadcasts. God had an answer for this “star worship” thirty-five hundred years ago: “You shall not make for yourself an idol, or any likeness of what is in heaven above” (Exod. 20:4). The spinning earth experiences a motion called “precession” that causes the earth to wobble like a spinning top. The wobble cycle takes twenty-six hundred years to complete. This means that the twelve constellations of the zodiac will shift by one constellation every two thousand years or so. The ancient astrological writings are useless.¹²

Today’s scientist realizes that the movement of the stars is the most precise clockwork known. Our clocks are set by it.

SUN AND STARS ARE LIGHTS

BIBLE WRITERS

1491–1451 B.C.

Moses spoke of the stars in heaven in the following passage: “And God made the two great lights; the greater light to govern the day, and the lesser light to govern the night; He made the stars also. And God placed them in the expanses of the heavens to give light on the earth” (Gen. 1:16–17).

ANALYSIS: The word “light,” in referring to heavenly light sources, is the Hebrew word *maor*, which literally means “light container” or “self-contained luminous body.” This is an accurate description of stars being their own source of light. Both stars and our sun are called “luminous bodies,” thus recognizing their sameness.

The definition for the Hebrew word *asah*, translated “made” in the first part of verse 16, is “constituted and appointed.” This is the same use when referring to certain Israel cities that were “made” appointed to be “cities of refuge” (Pss. 138:8–9). Thus, on the fourth day of Creation God appointed the stars and sun to their purpose of giving light to the earth both day and night.

12. “The Zodiac Isn’t What It Used to Be,” *Astrology and Astronomy*, Nov./Dec. 1980.

Note that the words in verse 16 “He made” and “also” are not found in the original text but were supplied by the imagination of the translators. The verse therefore should read “and the lesser to rule the night, the stars.”

FACT: Moses had knowledge that all stars are like our sun, and each contains its own source of light. He further prohibited their use in worship to God.

HISTORY OF SCIENCE

Pre-A.D. 1650

All civilizations, until the seventeenth century, placed a certain amount of religious significance in the heavenly bodies. Some thought them to be gods or deities, while others considered them to only reflect the light of our sun. None are known to believe stars were their own source of light and equivalent to our sun.

A.D. 1859

The newly developed spectro-telescope was used to analyze starlight. Only then was it proved that stars are their own source of light and equivalent to our sun.

2

GEOLOGY



FOUNDATION OF THE EARTH BIBLE WRITERS

2000 B.C.

Job writes of the foundations of the earth, “On what were its bases sunk?” (Job 38:4, 6). He adds that the shorelines were fixed at the same time, “Or who enclosed the sea with doors, when I placed boundaries on it, and I set a bolt and doors, and I said, “Thus far you shall come, but no further; and here shall your proud waves stop?”” (Job 38:8–11).

1033–975 B.C.

David wrote, “He established the earth upon its foundations, So that it will not totter forever and ever” (Pss. 104:5).

Solomon spoke, “He set for the sea its boundary, So that the water should not transgress His command, When He marked out the foundations of the earth” (Prov. 8:29).

628–588 B.C.

Jeremiah portrays the impossibility for man to accomplish “the foundations of the earth searched out below” (Jer. 31:37).

ANALYSIS: As we have already observed, Job wrote that the earth is “hung upon nothing” while it “turns.” Solomon recorded that the earth is “spherical.” Yet both men, as well as many other Bible writers, speak of the earth as having “foundations”—plural. Job declared that these “foundations” of the earth (the “dry land” as described in Gen. 1:10) to be designed and measured when laid. In the sixth verse a different Hebrew word is used to describe these “foundations.” The word translated as “bases” is from *eden*, which literally means “founda-

tion sockets.” Therefore, this verse would literally read, concerning dry land, “On what were its foundation sockets made to sink into?”

This design “shut up the sea with doors” and “marks out for it” its permanent “bounds.” Jeremiah implies that man will not be able to “search out” the earth’s foundation “below.” He parallels this with the impossibility of man to measure the heavens or cause the laws of the universe to depart from God.

FACT: These Bible writers wrote of an unmovable foundation that lay “below” their feet. Foundations that “marked out” the seas’ permanent “boundary,” foundations that cannot be “searched out” and that supported dry land by providing sockets for their “bases” to lay in.

HISTORY OF SCIENCE

Pre-A.D. 1934

What supports the ground beneath our feet has always been a subject of interest to mankind. Men have speculated many varied foundations: animals, pillars, Atlas, etc. The theory that had worldwide acceptance in the first third of the twentieth century concluded that the earth has *no* foundation but was full of hot molten nickel steel and covered with a floating thin crust. This theory was based on the fact that the earth increases in temperature as it is penetrated at the rate of 1°C per 100 feet, and the observation of the earth’s crust moving about during an earthquake, as though it were on a fluid base. The heavy liquid core was thought to occasionally erupt through volcanoes, and the flow indicated that the core temperature would be about 2000°C. Given the rate of heat increase through the crust coupled with the temperature assumption of the molten core beneath, the crust was estimated to have an average depth of twenty miles.

A.D. 1935

The development of precision chronometers, seismographs, and recording instruments brought about a revolution in men’s knowledge of the structure of this planet. When accurate measurements of time and earth vibration became possible, scientists discovered that an earth tremor caused two types of shockwaves to appear. One was a transverse wave, like the ripples in a bowl of Jell-O when it is shaken. This is called

an S wave, for shake wave. The other is known as a P wave, for push wave, and is a compression wave. The transmission characteristics are such that S waves disappear and will not be transmitted through three-dimensionally contained fluids, while P waves will travel through either fluids or solids, although the rate through will be slower.

A.D. 1960

In recording earth tremors of large magnitude with these precision tools, scientists have noted that if the quake was on the other side of the planet from the seismograph recording station, only a P wave would appear at several intervals, each with varying magnitudes. Yet, a quake in the near vicinity of a seismograph station would register both a strong P and S waves. From the compiling of earth tremor data, scientists have concluded that the earth has a liquid core, but only twenty-one hundred miles in radius with a dense mantle rock eighteen hundred miles thick over it.

A.D. 1964

By using sensitive seismic instruments that transmit information about the earth's interior, geologists learned much during the 1964 Alaskan earthquake.¹ Geologists have cooperated in a major study of this earthquake using information from one hundred stations located in more than fifty countries. Measurements of seismic wave velocities indicated that the upper surface of the mantle rock changes from about five miles below sea level at the edges of the continents down to depths twenty to forty-five miles. Thus, a bowl is formed for the continental material extending deep into the foundation mantle rock.²

With today's chronometers we can tell the speed with which these waves travel through the earth, thus establishing the densities of the materials. The mantle rock provides a constant velocity path for P shocks of 8.1 km/sec., indicating very heavy granite-type rock. This mantle rock is now known to be the "foundation" of our planet. Its inside contains a fluid core, and its outside shapes the continents and sea basins. Only two to three miles of sediment under the oceans cover it; then it dips deep beneath the continents, providing sockets for the six continents to rest

1. "When the Earth Rang Like a Bell," *Reader's Digest*, May 1964.

2. William M. Merrill, "Geology," *Encyclopedia Americana Annual*, 1965 ed., p. 294.

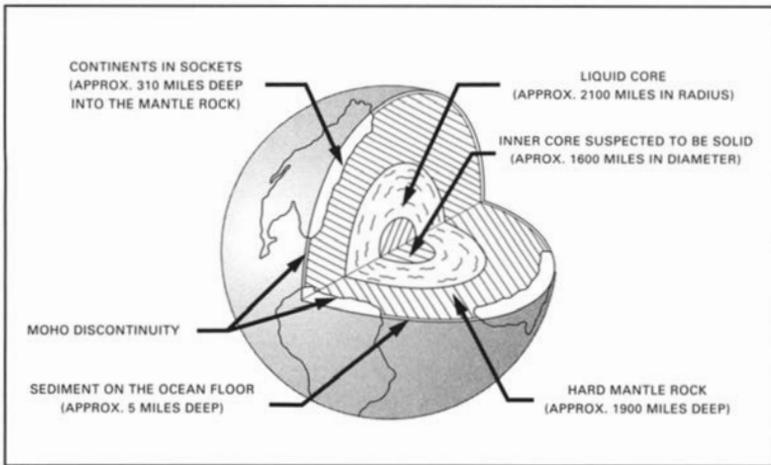


Figure 2.1 Earth's Cross Section

in. Thus, scientists have learned that the mantle rock gives this terrestrial sphere the division of earth and water on its surface by providing a fundamentally different geological structure for both (see Figure 2.1).

A.D. 1973

The Deep Sea Drilling Project, funded by the National Science Foundation, and managed by Scripps Institute of Oceanography, used the unique vessel *Glomar Challenger*, which incorporates the latest advances in offshore drilling technology. In 1975, after 246 holes were drilled in 154 sites in the ocean floor, the conclusion was reached that the ocean floor is of different geological origin than the continents and that it has never been dry land. Subterranean heat and upheaval were discovered to cause the ocean floor to grow and slowly slide toward the continents.³ This new drilling platform has provided information that the continents have always been independent of the ocean floor and that the shorelines are relatively fixed.

The theory that movement of the ocean floor has caused continents to drift is impractical on many points, including the impossibility of a

3. "Release Number 164," University of California, San Diego, Scripps Institution of Oceanography Deep Sea Drilling Project, 1971, p. 1.

thin sheet of sliding ocean floor on top of the mantle rock to move a massive continent anchored in a twenty to forty-five miles deep socket in the mantle. If such a movement of the continents has occurred, as is speculated by some, it could easily be accounted for in the arranging done on the third day of Creation by God (see Gen. 1:9, 10).

ENTIRE EARTH HAS BEEN UNDER WATER

BIBLE WRITERS

1491–1451 B.C.

Moses, in speaking of the preparation of the earth for habitation wrote, “And the earth was formless and void.” “Then God said, Let there be an expanse in the midst of the waters, and let it separate the waters from the waters.” “Then God said, ‘Let the waters below the heavens be gathered into one place, and let the dry land appear’; and it was so” (Gen. 1:2, 6, and 9).

Again Moses spoke of the earth later being covered completely with water during the life of Noah: “And the water prevailed more and more upon the earth; so that all the high mountains everywhere under the heavens were covered. The water prevailed fifteen cubits higher, and the mountains were covered, and the water prevailed upon the earth one hundred and fifty days” (Gen. 7:19, 20, 24).

1033–975 B.C.

David also spoke of the time at the Creation when the waters were separated: “Thou didst cover it with the deep as with a garment; the waters were standing above the mountains. At Thy rebuke they fled; at the sound of Thy thunder they hurried away. The mountains rose; the valleys sank down to the place which Thou didst establish for them. Thou didst set a boundary that they may not pass over; that they may not return to cover the earth” (Pss. 104:6–9).

ANALYSIS: Moses wrote of a time when the earth was “formless” and “void,” meaning without purpose, and water covered everything. It was at this time that the waters were separated and gathered to form the seas and the moisture in the atmosphere.⁴

4. See Chapter 9, “God’s Account of Creation.”

He wrote that during the flood the earth was covered a second time. This was after animal life was in existence and accounts for the sea life found on all mountain ranges.

FACT: In summarizing these writings, we see that the Bible writers were aware that this planet was twice engulfed with water, both times covering the tallest mountains.

HISTORY OF SCIENCE

Pre-A.D. 1669

“Before Geology could assume the character of a separate scientific discipline, the basic sciences, the knowledge of animals and plants, and the geography of continents and oceans had to advance sufficiently to provide a focus for thought concerning minerals, rocks, fossils, and landscapes. But above all, intelligent observation of what is seen in nature had to be substituted for the scholastic habit of reasoning in terms of abstract concepts.”⁵

A.D. 1669

Geology as a science was initiated in Italy when the Danish anatomist Nicolas Steno turned his attention to the structure of Tuscany, his adopted country. His study of animal anatomy led him into observations of mountain rock formations in which the fossils were found. The small book he published concerning his findings marked the beginning of systematic geological investigations.

A.D. 1885

Edward Suess was one of the first geologists to publish a study based on the geologic framework of all countries. His research led to his discovery that all land surfaces had been under water. His observations, gathered from all the world’s mountain ranges, revealed that they contain fossilize sea life, shark teeth being the most common. Also, it is now evident that even the oldest rock formations, such as evident at the Grand Canyon, show a sedimentary origin.

5. Walter H. Bucher, “Geology,” *Encyclopedia Americana*, Vol. 12, 1957 ed. p. 455a.

ALL SEAS LIE IN ONE BED**BIBLE WRITERS****1491-1451 B.C.**

Moses wrote of the formation of the seas, "Then God said, 'Let the waters below the heavens be gathered into one place, and let the dry land appear'; and it was so. And God called the dry land earth, and the gathering of the waters He called seas" (Gen. 1:9, 10).

FACT: Moses recorded that all waters stood in "one place," or "bed" as we now call it. He said that waters' name was Seas (plural), thus revealing there was more than one body of water in this common bed.

HISTORY OF SCIENCE**A.D. 1520**

As we already noted, it was not until the introduction of the compass and improved sailing vessels that the voyages of Columbus, Magellan, and others were made possible. "Ferdinand Magellan was probably the first explorer to attempt Oceanographically research on the great voyage which established the fact that a ship could sail around the earth."⁶ These men's discoveries led to establishing the fact that all large bodies of water are interjoined.

A.D. 1960

As noted previously, the foundation underlying the seas is of such structure that it is now considered by scientists to have always been a common seabed and never dry land. Recent oil and oceanographic coring have offered further proof by revealing only fossilized sea life in the ocean floor sediment.

Offshore drilling provides further evidence that the ocean floors have never been dry land. The core samples brought up reveal only sedimentary deposits containing sea life.

6. John Scott Douglas, *Story of the Ocean*, Dodd, Mead & Co., 1952, p. 4.

3

OCEANOGRAPHY



OCEAN CURRENTS

BIBLE WRITERS

1015 B.C.

David said that God has subjected all things to men, including “Whatever passes through the paths of the sea” (Pss. 8:8).

ANALYSIS: The Hebrew word for “paths” carries the literal meaning of “customary roads.”

FACT: David knew there were “paths” or “customary roads” in the sea, and that sea life “passed through these paths.”

HISTORY OF SCIENCE

A.D. 1855

The American admiral Matthew Fontaine Maury is recognized as the father of today’s science of oceanography. His other great accomplishment was the establishment of Annapolis Academy. A statue of Admiral Maury stands in the Boulevard of Heroes in Richland, Virginia. He holds charts of the sea in one hand, a Bible in the other, and on the base is the inscription “Path Finder of the Sea.” Until Admiral Maury’s efforts there were no charts of sailing lanes. One day during a temporary illness, his eldest son was reading to him from the Bible, and read Psalms 8:8.

Maury stopped his son and asked him to reread the passage. After hearing Psalms 8:8 again, Maury exclaimed that there must be paths in the sea if the Word of God says so, and he vowed to find them. Within a few years, he had charted the Atlantic Ocean’s sea lanes and currents. His textbook *Physical Geography of the Sea* was the first on modern oceanography.



Figure 3.1 Admiral Maury's Statue

Since his discovery of the paths of the sea, commercial fishermen have learned that schools of fish are frequently found passing through them in search of food that these currents carry along.

RECESSES OF THE DEEP

BIBLE WRITERS

2000 B.C.

“Have you walked in the recesses of the deep?” (Job 38:16).

1015 B.C.

David in a psalm spoke of these recesses: “The channels of the sea appeared, The foundations of the world were laid bare” (2 Sam. 22:16).

ANALYSIS: The word “channels” can literally mean “canyon” or “crevasse.” This psalm of David was written using the form of Hebrew poetry

where the second verse usually repeated the thought of the first, but in different words. He compared the exposing of “the channels of the sea” to the laying bare of “the foundations of the world.”

FACT: Job and David spoke of “recesses” or “channels” of the sea. David claimed the bottom of these would penetrate to “the foundations of the world.”

HISTORY OF SCIENCE

A.D. 1504

Juan de la Costa made the first ocean depth soundings in 1504. They were made in shallow water near the coast and placed on his map. This effort did nothing to change the universal opinion that the ocean floors were flat, sandy beds like our deserts.

A.D. 1840

“In 1840 Sir James Clark Rose made the first true oceanic sounding, reaching a depth of nearly 2000 fathoms with a weight on the end of a hemp line.”¹ Beyond this depth it was impossible to know when the ocean bottom was touched using his method.

A.D. 1873

The British ship *Challenger* was the first vessel outfitted solely for sea exploration. The now famous Challenger Expedition (1872–76) marks the beginning of modern deep-sea exploration. This expedition found one isolated depth of 4,500 fathoms (5½ miles) in the Pacific Ocean, thus being the first to discover an underwater trench or canyon.

A.D. 1911

Reginald A. Fessenden introduced echo sounding, although it remained undeveloped until World War II. This method of measuring the depth of a body of water utilizes radio signals or explosive charges by placing them just beneath the surface and directing their discharge in the direction of the ocean floor. These radio waves or shockwaves then travel to the floor and bounce or reflect back to a receiver. The

1. Francis P. Shepard, *The Earth Beneath the Ocean*, Johns Hopkins, p. 161.

time intervals between the sending and receiving of a signal can be translated into distance.

A.D. 1945

“Before the invention of echo-sounding equipment it was generally thought that the bottom of the oceans would present the appearance of plains, plateaus, and gently rolling terrain. Now we know that it has valleys and mountain ranges, and even canyons, to equal all the forms we find on land.”²

Echo-sounding research used in submarine warfare later developed into a practical scientific tool. After the war the U.S. Navy equipped its vessels with echo-sounding and recording equipment. Since soundings can be taken while the ship is moving, much of the ocean floor began to be mapped.

The systematic crisscrossing of both private and military boats using sounding equipment has, since 1945, given us our current knowledge. We now know these gigantic under water canyons circle the globe at great depths. The deepest recorded canyon to date is the Marianas Trench, near the Philippines, that is over seven miles deep. The Tonga Trench is a mile deeper than Mt. Everest is high, and Peru-Chile Trench has one wall that rises more than forty-two hundred feet. Our Grand Canyon is a miniature compared to these sea canyons.

A.D. 1964

The first humans to travel along the bottom of an ocean trench did it in the two hundred-ton French bathyscaphe, *Archimede*. Ten trips 27,500 feet deep were made to the bottom of the Puerto Rico Trench, the deepest known part of the Atlantic Ocean. These trips were part of Operation Deepscan, a joint Franco-American oceanographic project. The most surprising discovery made by the *Archimede* was that the trench is terraced into steps hundreds of miles long and about ten feet high on both its north and south walls. Other discoveries included the great amount of sea life that exists at the bottom where pressures reach twelve thousand pounds per square inch.

2. Maurice Ewing and Bruce C. Heezen, “Deep Sea Exploration,” *Encyclopedia Americana*, Vol. 8, 1957 ed., p. 580.

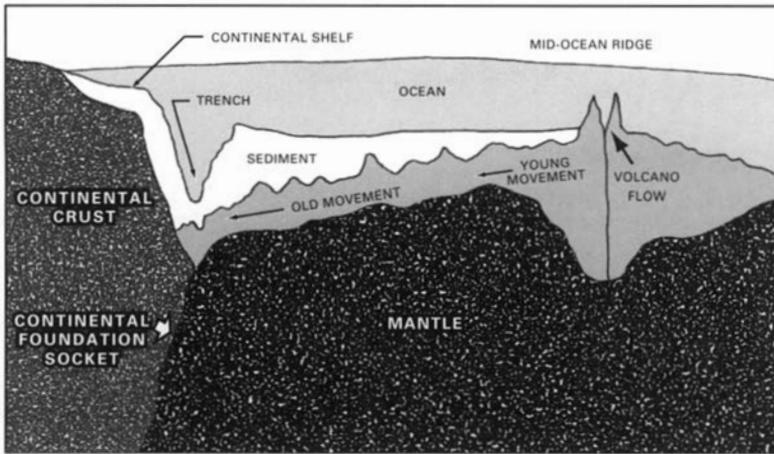


Figure 3.2 Trench In Ocean Floor

A.D. 1970

The Glomar Challenger is being used as a drilling platform as previously described in Chapter 2. Since 1970, the drilling for core samples has taken place in the trenches through a water depth of 20,000 feet, with a penetration into the ocean floor of 3,334 feet.³ A new drill hole reentry technique allowed even deeper penetration in the future.

The Deep Sea Drilling Project has provided an explanation for the formation of the trenches. The spreading ocean floor continually moves from the midocean ridge toward the continental crust, where it slides down against the continental "socket foundation" and is absorbed in the mantle. Thus, a deep trench is formed at the edge of the continental shelf.⁴

How true it is, as written by David, when "the channels of the sea appear, the foundations of the world are laid bare."

A.D. 1971

For the first time in man's history, a complete map of the ocean floor has been compiled and was made available, showing the complete "recesses of the deep."

3. M. N. A. Peterson, *Deep Sea Drilling Project: Reasons And Results*, Deep Sea Drilling Project, 1970, p. 1.

4. *Ibid.*, p. 12.

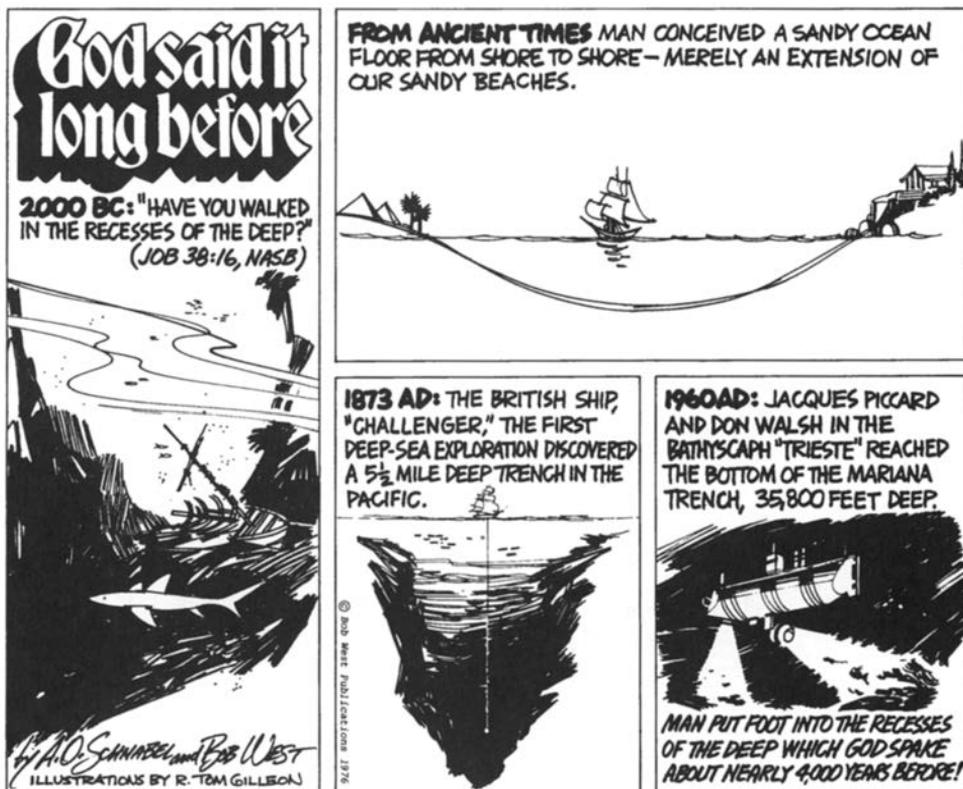


Figure 3.3 The Recesses of the Deep

A.D. 2003

Satellites are now able to strip water from the view of the ocean floor. “Until now, 71 percent of Earth was not as well mapped as the surface of Venus. But the National Oceanic and Atmospheric Administration corrected the situation Monday [December 1, 2003], unveiling the first good map of the ocean floor. ‘It’s like being able to drain the oceans and look at the Earth from space,’” said David Sandwell, geophysicist at Scripps Institution of Oceanography.⁵

5. “Satellites Strip Water from Seas,” *Tampa Tribune*, Dec. 1, 2003.

SPRINGS IN THE OCEAN**BIBLE WRITERS****2000 B.C.**

“Have you entered into the springs of the sea?” (Job 38:16a).

1491–1451 B.C.

Moses, in his account of the flood in Noah’s time, recorded what one source of water was: “All the fountains of the great deep burst open,” and “The fountains of the deep were closed” (Gen. 7:11, and 8:2).

1033–975 B.C.

Solomon wrote of Creation, “When the springs of the deep became fixed” (Prov. 8:28).

FACT: The composite information of these writers shows that they understood there to be underwater “springs” or “fountains” on the ocean floor. The openings were large enough for a person to walk into. They have been a source of water since the oceans were formed, including an exceptionally heavy flow for forty days during which time water rose to cover the mountains.

HISTORY OF SCIENCE**A.D. 1930**

Unknown sources were found to be providing fresh water welling up to the surface in the ocean. Some of these sources have been discovered, by using deep-sea diving equipment, to be large underground rivers flowing within the continental shelf. Their headwaters are at a high inland mountainous elevation, while their outlet is where the continental shelf drops abruptly to the ocean floor.

A.D. 1945

It was not until oceanography research ships plied the seas after World War II, using the latest equipment including explosive charges for their depth recorders, that underwater volcanoes were discovered. There are estimated to be at least ten thousand volcanoes dotting the floor of the central Pacific Ocean alone. Many stand tall and narrow, extending thousands of feet high. Their underwater appearance

would be as a forestland of chimneys protruding from the ocean floor to various heights.

Research by Dr. William W. Rubey of the U.S. Geological Survey has shown that the present rate of water release from underwater volcanoes, fumaroles (secondary volcanic outlets), and hot springs is 430 million tons per year.⁶ The earth's heat drives the entrapped water from underground molten rock and forces it out through one of these natural openings.

Dr. Lawrence J. Kulp of Columbia University has shown that this release of new water is possible since the earth is estimated to have one-half of 1 percent of its weight in water entrapped within its rocks. Dr. Kulp's measurements resulted in the following conclusions:⁷

1. Measured water in a rock averages .5 percent to 1 percent of its weight.
2. The earth weighs about six billion trillion (6×10^{21}) tons.
3. Therefore, .5 percent of the earth's weight is thirty million trillion (30×10^{19}) tons.

If 6 percent of the earth's water escaped from the interior of the earth, it would be enough to fill all the seas, or two million trillion (2×10^{18}) tons.

6. William J. Cromie, *Exploring the Secrets of the Sea*, H. J. Prentice Hall, Inc., 1962, p. 15.

7. Ibid.

4

METEOROLOGY



WATER VAPOR CYCLE BIBLE WRITERS 2000 B.C.

“For He draws up the drops of water, they distil rain from the mist, which the clouds pour down, they drip on man abundantly” (Job 36:27, 28).

1033–975 B.C.

Solomon wrote: “All the rivers flow into the sea, yet the sea is not full. To the place where the rivers flow, there they flow again” (Eccles. 1:7).

ANALYSIS: The Hebrew and English definition of “distil” is to have the small moisture droplets of steam or vapor condense and collect into water drops large enough to become heavy and fall.

FACT: These Biblical writers recognized the basic mechanics of the water vapor cycle. All rivers empty into the sea from higher ground. Drops of water are drawn up from the sea, forming vapor clouds. These “mist” droplets are transported as clouds until they distill “in rain” and thus “return” to the place they began the rivers.

HISTORY OF SCIENCE 350 B.C.

Aristotle is accredited with being the first to comprehend the water vapor cycle that produces rain. His *Meteorologica* became standard treatise for two thousand years. In it, he theorized clouds and rain are caused by condensation of water vapor from the atmosphere that had gotten there by evaporation of water at the surface of the earth.

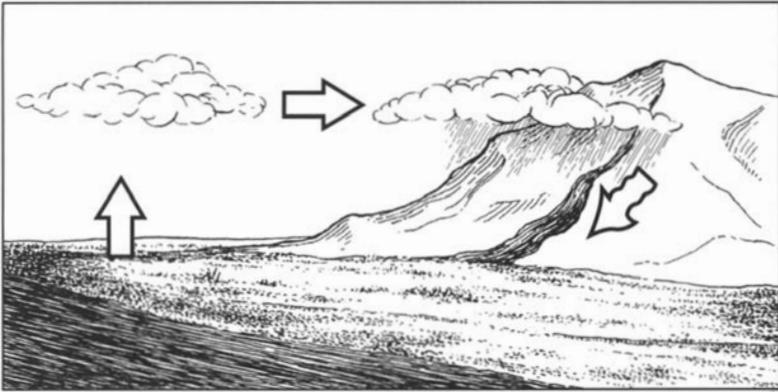


Figure 4.1 Water-Vapor Cycle

His observations concluded that this was only a localized cycle, where rain replaced the water in the area from which it had vaporized.

A.D. 1520

Until it was known that the earth was spherical, the common belief was that the rivers flowing into the oceans did not cause the ocean to rise because an equal amount of water was spilling off the ends of the earth. Before Magellan's discovery, no scientist conceived the idea that it was the water of the ocean that was being cycled to provide the fresh water of the rivers.

A.D. 1770

It was not observed until the eighteenth century that clouds could transport moisture away from the area in which they were formed. From observations at only a few points, Benjamin Franklin was the first to recognize that individual storms move from place to place over the earth's surface. Benjamin Franklin published the river-to-sea-to-river water cycle from his observations, thus greatly aiding the study of weather by men (see Figure 4.1).

A.D. 1841

Galileo invented the thermometer in 1593 and Evangelista Torricelli the barometer in 1643. With the aid of these instruments, "Espy was

among the first to point out the importance of expansion and cooling of rising air in production of clouds.”¹ Thus, the origin of the clouds was proved for the first time. It is now known that the precipitation and evaporation rate is approximately sixteen million tons per second. This is equivalent to an annual rainfall for the entire earth of three feet.

WIND CIRCULATION

BIBLE WRITERS

2000 B.C.

Job wrote: “When He imparted weight to the wind,” and “Out of the chamber of the south comes the storm, and out of the scattering winds the cold” (Job 28:25, 37:9).

1033–975 B.C.

Solomon recorded that “Blowing toward the south, then turning toward the north the wind continues turning along; and on its circular courses the wind returns” (Eccles. 1:6).

ANALYSIS: The word “south” as used by Job is the same as Solomon’s use. It means “toward the south,” yet interestingly we call it a north wind. The verse would read literally, “out of the chamber of ‘south heading winds’ cometh the storm.”

The word “weight” is from *mishgal*, which is a “numerically calculated weight.”

FACT: These men wrote of the following facts about the wind:

1. It had weight.
2. It came out of a “chamber” in the north.
3. Wind has “circular courses” and flows south out of the chamber only to “return.”
4. Storms travel southward out of this “chamber.”

1. Joy S. Winston, “Meteorology,” *Encyclopedia Americana*, Vol. 18, 1957 ed., p. 714.

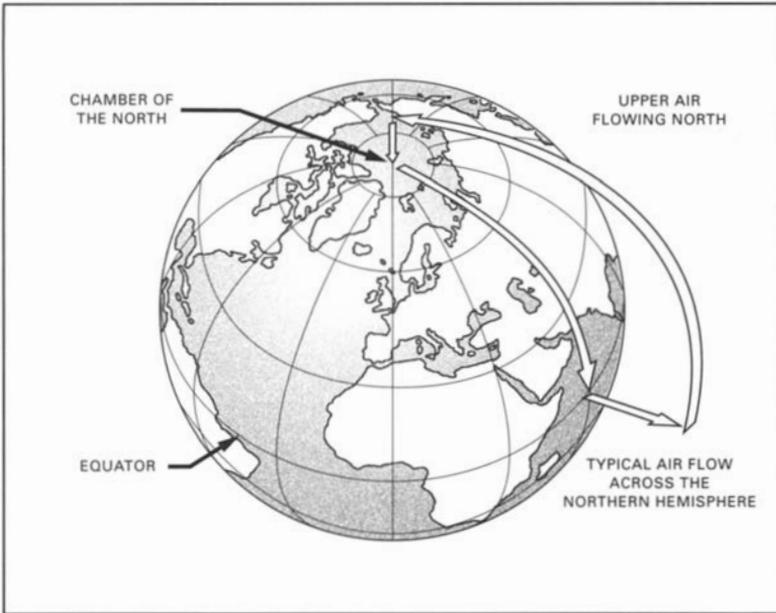


Figure 4.2 Circular Course of the Wind

HISTORY OF SCIENCE

A.D. 1643

Evangelista Torricelli invented the barometer, thus establishing as fact that air (wind) has weight and measures 14.7 pounds per square inch at sea level.

A.D. 1820

Around 1820 a German physicist and astronomer, Heinrich Brands, collected observations and composed the first synoptic weather map.

A.D. 1940

As high-flying jet aircraft and special balloons provided observations in the upper atmosphere, it was discovered that there is a basic pattern for air circulation. The sun warms the ground, which then heats the air, causing it to rise. The sunrays strike obliquely at the poles, causing

the ground there to heat air less than at the equator. Warm air rises at the equator, causing greater pressure at altitude. Air pressure at the ground level is greater at the poles because it is colder and denser. This pressure differential forces the air rising at the equator to flow north at high altitude until it cools and drops down at the pole, at which time it flows southward to fill the space at the equator being emptied by the rising air there (Figure 4.2).

The U.S. Weather Bureau recognized the importance of air masses as they accumulate at the North Pole in effecting this hemisphere's storms. They have set up a weather station in the frozen land to help in weather prediction.

CLOUDS HAVE BALANCING

BIBLE WRITERS

2000 B.C.

The following statements are found in Job's writing:

"Do you know the balancing of the clouds?" (Job 37:16)

"Who can number the clouds by wisdom?" (Job 38:37)

"Can any understand the spreading of the clouds?" (Job 36:29)

FACT: It is written that clouds had "balancing," that there was something to be understood in the "spreading," and that it took wisdom to know the right "number" of clouds that are necessary.

HISTORY OF SCIENCE

1860 B.C.

The Dutch meteorologist Christopher Buys Ballot formulated his famous Buys Ballot's Law on the relation between pressure and wind. This was the start of our understanding of the balances that cause clouds.

A.D. 1930

Through the use of high altitude airplanes and weather balloons, meteorologists continued to accumulate information concerning the cloud balancing, atmospheric pressures, and temperatures.

A.D. 1950

High-altitude airplanes instrumented to detect electrical fields noted an average of one-ampere high electrical energy flow upward from the top of a thunderstorm cloud to the ionosphere (upper atmosphere). This showed that a thundercloud can be considered as a negative electrical pump conveying a negative charge to the earth and a positive charge to the upper atmosphere. It was learned that the ionosphere continually discharged a current of eighteen hundred amperes to the earth over the whole globe. Instrumented warheads on research missiles that revealed the total charge of the ionosphere would discharge completely in five minutes. Thunderstorms supply the reverse current necessary to maintain potential between the earth and the upper atmosphere. It was estimated to take eighteen hundred thunderstorms at any one instant to do this. Thus, for the first time, man was able through acquired knowledge to guess the number of the clouds on our earth.

A.D. 1960

The Tiros Weather Satellite series has been of tremendous importance to atmospheric research. It has provided our first comprehensive view of the earth's cloud cover and showed large storm cloud formations to be spread spiral in nature. It proved the constancy of the number of thunderstorms (eighteen hundred) at any one time. The satellite is providing new data on the earth's heat balance. "The general circulation of the atmosphere is regulated by heating of the earth by sunlight and cooling by reradiating to space. In order to better understand these processes, and in particular to obtain knowledge concerning the heat balance of the earth, detailed information concerning cloud cover is essential."²

A.D. 2000

Today, geostationary weather satellites' images show every violent swirl of tropical storms from birth to death, giving emergency planners time to evacuate threatened areas.

2. David M. Gates, "Astronomy," *Encyclopedia Americana Annual*, 1961 ed., p. 60.

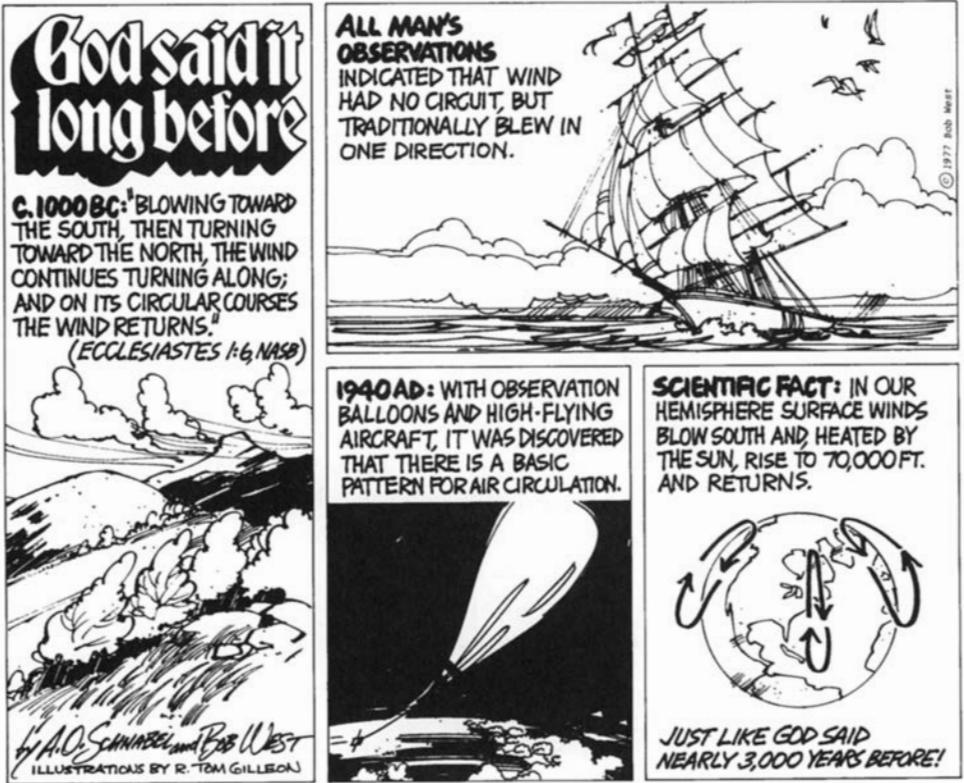


Figure 4.3 The Circular Courses of the Wind

Now we can daily watch “the spreading of the clouds” on the television weather analysis by meteorologists who know “the balancing of the clouds.”

LIGHTNING CAUSES RAIN

BIBLE WRITERS

2000 B.C.

Job records God saying, “Who has cleft a channel for the flood, or a way for the thunderbolt; to bring rain on a land without people, on a desert without a man in it, to satisfy the waste and desolate land, and to make seeds of grass to sprout?” (Job 38:25–27).

FACT: In Job it states factually that "thunderbolts" (lightning) cause rain to fall and water the ground where man does not live. He also speaks of a "way," or path, that is a "channel" for the thunderbolt.

HISTORY OF SCIENCE

A.D. 1930

Using a high-speed camera invented by Sir Charles Boys, Professor Basil Schonland in South Africa and Dr. Karl McEachron in the United States discovered that lightning developed only after "leaders" passed from the clouds down to the earth. First an invisible pilot leader descends from the negatively charge cloud, then an invisible step leader follows it to the ground creating an ionized path for the visible lightning bolt to ascend carrying fifteen million into the cloud. These leaders made a path for the lightning stroke to discharge from the earth to the clouds. Only by slowing down the film, which had taken pictures at one hundred miles per hour, could this initial probing weak electrical stroke be seen as it sought out a source of stored electrical energy in the earth, that it might provide a path for that energy to travel to the clouds. These leaders cleave a "way" for the thunderbolt.³

A.D. 1960

Meteorologists began for the first time to understand about the cause-and-effect of electrical charges on cloud formation and rain discharges. Facts were accumulating that indicated electrical charges in the atmosphere occur just before formation and dissipation of fog. A cloud droplet will not form until it has a small particle to form a water shell around. This cloud droplet is a long way from being a raindrop, for it takes about a million of them to make one drop. A research program was begun to determine if electrical activity had a part to play in the formation of a raindrop from the droplets of a cloud. This explains why clouds laden with moisture could exist for days without developing any rain.

In 1964 a discovery was made that electrical phenomena of considerable magnitude accompanies tornadoes and that the energy appears to be adequate to maintain the force of the tornado vortex. One of the most promising studies was of rain gushes at the Grand Bahamas Island

3. J. H. Hagenguth, "Lightning," *Encyclopedia Americana*, Vol. 17, 1957 ed., p. 396b.

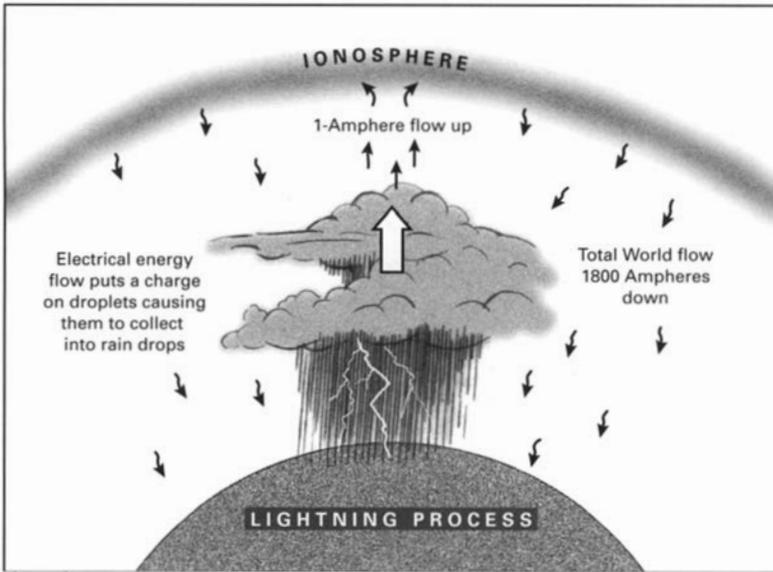


Figure 4.4 Lightning Causes Rain

by means of centimetric radar. It showed that the large drops of water responsible for a gush were not present before lightning occurrence but were formed after discharge had taken place. Large drops were seen to collect in an extensive vertical section of the cloud lying below the 0°C level and in some tens of seconds could be followed in the subsequent fall toward the ground. The cause of this phenomenon is leaders, which are the multiple discharge streamers into the cloud of ground-to-ground lightning (Figure 4.4). The electrical discharge leaves the droplets that were in the discharge path with a charge opposite in polarity to the original part, which still resides on droplets adjacent to streamer path. Neighboring drops are attracted to each other and form large drops that are heavy enough to overcome the cloud updraft and fall to earth.⁴

A.D. 1965

In this year the following demonstration proved to meteorologists that it takes cloud electrical charges to cause rain. "An experiment in the

4. D. J. Malan, *Physics of Lightning*, English Universities Press Ltd., 1963, p. 166.



Figure 4.5 Lightning Causes Rain

laboratory demonstrates the theory that in the presence of an electrical field water droplets will combine to form raindrops. Tiny droplets like those in a cloud shot from a hypodermic needle will simply ricochet off one another under normal conditions. But in the presence of a comb charged with static electricity they combine and become a single large drop.⁵ The heavier the rain, the greater amount of electricity needed to collect the cloud droplets into raindrops. This is why during a heavy downpour there is a high amount of electrical activity, usually in the form of lightning.

5. Philip D. Thompson and Robert O'Brien, "Weather," *Life Science Library*, Time, Inc., 1965, p. 103.

5 PHYSICS



ALL MATTER AND ENERGY COMPLETED AT UNIVERSE'S ORIGIN

BIBLE WRITERS

1451 B.C.

Moses declared, "Thus the heavens and the earth were completed, and all their hosts" (Gen. 2:1, 2).

A.D. 63

Paul writes, "The works were finished from the foundation of the world" (Heb. 4:3).

ANALYSIS: The phrase "all their hosts," which is translated the Hebrew expression *kal tsbaah*, carries the meaning of "everything in them," or "everything therein." Thus Moses wrote that the heavens and the earth were complete, indicating that nothing, neither matter nor energy, has been needed or added since the time of the universe's origin.

FACT: Moses and Paul both attest to the fact that absolutely nothing has been added to the universe since it was "finished" at the time of its origin.

HISTORY OF SCIENCE

Pre-A.D. 1841

Historical records show men conceived that the universe was never one of a closed finished system after its origin. There was always the strong belief in a continual creation, or the "spontaneous generation" of living things, and the disappearance into nothing of many things.

A.D. 1841

In 1841 Mayer formulated the Law of Conservation of Mass and Energy, which is also known as the First Law of Thermodynamics and is considered the most important and basic law of all physical science. This law of energy conservation states that the sum total of all energy in the universe remains constant, but one form of energy may be converted into another.

A companion law is the Law of Mass Conservation, which states that although matter may be changed in size, shape, form, etc., the total mass cannot be changed. These laws state that *no* creation or destruction of matter or energy is now being accomplished anywhere in the universe. They define the universe as functioning on that matter and power with which it originally began.

We have since learned that forms of energy and matter can be interchanged, but in the process no new energy or matter is brought into, or taken out of, existence.

THE UNIVERSE IS DECAYING

BIBLE WRITERS

745–695 B.C.

“Lift up your eyes to the sky, then look to the earth beneath; for the sky will vanish like smoke, and the earth will wear out like a garment, and its inhabitants will die in like manner” (Isa. 51:6).

538 B.C.

Psalms declares of the heavens and the earth: “Even they will perish, but Thou dost endure; and all of them will wear out like a garment” (Pss. 102:26).

A.D. 63

“Thou, Lord, in the beginning didst lay the foundation of the earth, and the heavens are the works of thy hands: they will perish, but Thou remainest; and they all will become old as a garment” (Heb. 1:10, 11).

ANALYSIS: To “wear out like a garment” is to deteriorate or decay through age and use.

FACT: These writers picture the total universe as deteriorating through age from its original “finished” state. The fact that the universe is deteriorating establishes beyond doubt that it has not been here forever; therefore it must have had a beginning.

HISTORY OF SCIENCE

A.D. 1850

The first indication science had that the universe was growing old and being deteriorating was the discovery of the Second Law of Thermodynamics, or as it is sometimes referred to, the Law of Entropy. This law is of almost as great a significance to science as the First Law of Thermodynamics.

This law of energy deterioration states that in any energy transfer or change, although the total amount of energy remains unchanged, the amount of usefulness and availability that the energy possesses is always decreased. As the total of useless energy increases, the useful decreases by the same amount. This ratio of useless to useful energy is called “entropy.” The Law of Entropy states that the ratio is constantly increasing and irreversible in flow. Since all activities of nature, including biological, physical, chemical, etc., involve energy transfers, there must be an ever-decreasing supply of usable energy for maintaining the energizing processes in the universe.

An example of this deterioration is shown by use of the spectroscope in analyzing the sun. This study revealed that the hydrogen in the sun is being converted to helium at the rate of 4.6 million tons per second in the process of producing radiant energy. “Eventually the sun must burn itself out, and then all activity on the earth must cease as well. The same principle applies to all the stars of the universe, so that the physical universe is beyond question, growing old, wearing out, and running down.”¹

Another proof of this “decaying” is that radioactive minerals are in a natural process of radioactive disintegration. As uranium and thorium disintegrate into other elements, they yield great quantities of heat, which are radiated into space. This heat energy enters a state that cannot be used by us again.

1. Henry M. Morris, *The Bible and Modern Science*, Moody Press, 1951, p. 15.



Figure 5.1 The Earth Will Wear Out

UNIVERSE BUILT OF THINGS NOT SEEN BIBLE WRITERS

A.D. 63

"By faith we understand that the worlds were prepared by the word of God, so that what is seen was not made out of the things which are visible" (Heb. 11:3).

"Upholding all things by the word of His power" (Heb. 1:3).

ANALYSIS: The word "things" is used in the Greek language to describe the smallest, most elementary, basic parts of anything. The letters of the alphabet are such "things" for our language.

The Greek word *dunamis* means “inherent power,” power residing in a thing by virtue of its nature. It is from this word we derive “dynamite” and “dynamo.”

FACT: It was taught that “all things” are “upheld” and “hold together” by “inherent power,” “so that what is seen was not made out of the things which are visible.” In other words, the material of the universe is not ultimately physical, but composed of something that is not “apparent.”

HISTORY OF SCIENCE

A.D. 1895

Wilhelm Conrad Roentgen began the modern era of atomic physics with the discovery of X-rays. This began science’s exploration into the unseen elements that make up our world.

A.D. 1923

Men of past times have reasoned that all matter was built from visible things and could be completely and accurately described in terms of mechanical laws and models. As men’s knowledge of matter grew through the development of instruments, it was learned that matter was divided into smaller and smaller particles. Whole molecules were seen using microscopes, then atoms. These atoms were thought to be the smallest division of matter until Dr. Robert Millikan developed an apparatus with which he isolated electrons. This discovery in 1923 won him the Nobel Prize for Physics and put the electron theory on a solid basis by devising a method for observing the charge of a single electron.

A.D. 1970

We have passed through the electronic age, atomic physics, nuclear physics, and now what physicists called the age of particle physics. At Brookhaven, New York, the world’s largest accelerator (atom masher) accelerates protons to fantastic speeds and bombards various elements with these protons. This collision causes heretofore unknown particles to break off the target atoms. New particles are still being discovered.

A.D. 2001

Precise observations of subatomic particles at Brookhaven National Laboratory made an unexpected find. The experiment, called E821, created muons, which are subatomic cousins of electrons. The goal of modern physics is to discover a guiding principle that correlates all present knowledge about these unseen and yet to be explained entities.

Scientists now understand that all matter is composed of small unseen particles, thus described as things that are not apparent. In fact, the further science probes into matter, the more it is revealed that matter can be considered in terms of energy. For example, the actual matter in the human body would be smaller than the head of a pin.

LIGHT SPECTRUM

BIBLE WRITERS

2000 B.C.

Job speaks of light in the following verses: "Where is the way to the dwelling of light; and darkness, where is its place?" (Job 38:19).

"Where is the way that the light is divided?" (Job 38:24).

ANALYSIS: The Hebrew word for "way" is *derek*. The word carries not only the usage as related to the way (path) to something but also the way (how) something is done. The first part of verse 19 literally translated from Hebrew reads, "What is the way (path where) the light dwells?" In verse 24 the word "way" would be "method," or "what manner" is light apportioned, or properly divided?

FACT: Job correctly stated the fact that light "dwells" in a "path," while darkness "exists" in a "place." He wrote that light could be "apportioned" and asked, "By what method?"

HISTORY OF SCIENCE

A.D. 1666

Sir Isaac Newton first demonstrated that light can be parted, or apportioned, when he discovered that a glass prism can be used to split a beam of light into bands of spectra colors. From this experiment came the instrument known as the spectroscope, although it was not until 1859 that its practical value was realized as a scientific tool. There

is a field of science called spectroscopy, which is built entirely around apportioning light.

A.D. 1675

In 1675 Roemer first discovered the fact that light was not an instantaneous transmission but required a definite time to pass through space and therefore exists in a path. Now science knows, through the use of instruments, that light dwells for years in paths while traveling in that path at the rate of 186,000 miles per second. Strangely enough, science cannot exactly define what light is, for neither the current wave theory nor the past emission theory can account for all the facts.

6

BIOLOGY



THREE KINGDOMS OF NATURAL SCIENCE

BIBLE WRITERS

1491–1451 B.C.

In the first chapter of Genesis, Moses records the beginnings of all nature:

“Let there be light” (Gen. 1:3).

“Let the waters under the heavens be gathered together unto one place, and let the dry land appear: and it was so” (Gen. 1:9).

“Let the earth sprout vegetation, plants yielding seed, and fruit trees bearing fruit after their kind, with seed in them, on the earth” (Gen. 1:11).

“And God created the great sea monsters, and every living creature that moves, with which the waters swarmed after their kind, and every winged bird after its kind” (Gen. 1:21).

“Then God said, ‘Let the earth bring forth living creatures after their kind: cattle and creeping things and beasts of the earth after their kind; and it was so’” (Gen. 1:24).

“And God created man in his own image” (Gen. 1:27).

ANALYSIS: Moses discusses origins by dividing the subject into three categories: the origin of minerals (verses 1–10), the vegetable kingdom (verses 11–13), and the animal kingdom (verses 20–31).

FACT: The first chapter of Genesis is divided into the three kingdoms of natural science, placed in their proper order for survival during the Creation. The order of these kingdoms in Genesis is mineral, vegetable, and animal.

**HISTORY OF SCIENCE
600 B.C.**

Aristotle reasoned for the widely accepted belief that nature consisted of four elements: earth, air, fire, and water.

A.D. 1740

No records of Babylon, Assyria, Egypt, or Greece indicate such a division of nature. The division that was commonly used was that between life and nonlife. "It was finally Carolus Linnaeus, a Swedish botanist, who propounded the method and scheme of classification upon which all subsequent ones have been based."¹ He recognized that there are three basic kingdoms of natural science: mineral, vegetable, and animal. These are now subdivided into genera and further subdivided into species as a fundamental unit of classification.

**MAN AND WOMAN EACH HAVE
SEED OF PROPAGATION
BIBLE WRITERS
1491-1451 B.C.**

Moses wrote of God speaking to Satan in Genesis 3:15, "And I will put enmity between you and the woman, and between your seed and her seed."

Moses also recorded in Genesis 13:15 God speaking to Abraham, "The land which you see, I will give it to you and to your descendants forever. And I will make your descendants as the dust of the earth; so that if anyone can number the dust of the earth, then your descendants can also be numbered."

A.D. 63

Hebrews 7:9-10 reads, "And, so to speak, through Abraham even Levi, who received tithes, paid tithes, for he was still in the loins of his father when Melchizedek met him."

ANALYSIS: The Bible's use of the word "seed" denotes the descendants generated by an individual's reproductive seed. In God's speech

1. Robert Chambers and Alma Payne, *From Cell to Test Tube*, Charles Scribner's Son, 1960, p. 20.

to Abraham, the word “descendant” is derived from the same word “seed” as used in Genesis 3:15. Examples of the male having seed that produces descendants are found in the reference to Levi, who was a descendant of Abraham four hundred years after Abraham died (Heb. 7:9–10), and to the Messiah being called Abraham’s seed (Gal. 3:16).

FACT: Moses’ writings revealed that both men and women had “seed” necessary to produce descendants.

HISTORY OF SCIENCE

A.D. 1000

To this time it had been universally accepted that only the males of a species had the seed of propagation. Michael Psellos, who lived in Constantinople during the eleventh century, is the first recorded scientist to believe that both male and female contributed biological material to produce an embryo although his views were not accepted.²

A.D. 1451–1519

Leonardo da Vinci was ahead of his time when he observed, “If black gets black with child, the offspring is black; but if a black gets white with child the offspring is gray. And this shows that the seed of the mother has power in the embryo equally with that of the father.”³

A.D. 1600

“Before the invention of the microscope, observations on development were of the most superficial sort and the genesis of the organism from the egg was chiefly a problem for the philosopher.”⁴ During the seventeenth and eighteenth centuries, the theory known as preformation was the dominant view. According to this theory, nothing new arises, but each germ, or seed, must contain, in diminishing series, the germs of all succeeding generations. This is known as the box-within-box theory. Naturally, most of the preformationists believed the germ to be contained in the female egg.

2. M. J. Sirks and Conway Zirkle, *Evolution of Biology*, Ronald Press Co., 1964, p. 93.

3. Chambers and Payne, *From Cell to Test Tube*, p. 124n1.

4. J. H. McGregor, “Embryology,” *Encyclopedia Americana*, Vol. 10, 1957 ed., p. 277.

A.D. 1677

The discovery, via the microscope, of spermatozoa by Hamm caused the rise of a new group of theorists known as spermists, who adopted the view that these minute living bodies carried the germs, and therefore the egg was merely a fertilizer.

A.D. 1880

“It was 1880 before establishment of the equality of the female ovum with the male spermatozoon, thus ending the prolonged battle between the spermists and ovarists, also know as preformationists.”⁵ At this point in time, science resolved the philosophical arguments about the reproduction of human life by proving both parties wrong. Both men and women have seeds of propagation.

TODAY

Modern instruments have provided the knowledge that when a single sperm unites with a single ovum, they form a new cell called a zygote. The zygote contains all the genetic material in its nucleus to grow, develop, and differentiate into approximately fifty trillion cells of a mature adult.

**ALL ANIMALS REPRODUCE
AFTER THEIR OWN KIND
BIBLE WRITERS**

1491–1451 B.C.

Moses recorded that “God created the great sea-monsters, and every living creature that moves, with which the waters swarmed, after their kind, and every winged bird after its kind. Then God said, ‘Let the earth bring forth living creatures after their kind: cattle and creeping things and beasts of the earth after their kind’; and it was so. And God made the beasts of the earth after their kind, and the cattle after their kind, and everything that creeps on the ground after its kind” (Gen. 1:21, 24, 25).

“Of every living thing of all flesh, you shall bring two of every kind into the ark, to keep them alive with you; they shall be male and female. Of the birds after their kind, and of the animals after their kind, of every creeping thing of the ground after its kind” (Gen. 6:19, 20).

5. Chambers and Payne, *From Cell to Test Tube*, p. 93.

ANALYSIS: The Hebrew meaning for “kind” or “sort” is considered the basic divisions of animal life, relative to genera, family, or order.

FACT: Moses considered it fact that “every living creature that moves,” whether in the “waters” or “birds,” or “beasts,” or the things that “creep,” “multiplied after its own kind,” and there is both “male and female” of “every living thing” in the animal kingdom.

HISTORY OF SCIENCE

A.D. 1900

At the beginning of the seventeenth century, Europe still believed in hybridized animals. These were the supposed intermixing through mating between species. Weird offspring were reportedly seen by learned men in remote places, and some animals, such as the hyena, were believed to change their sex every year.

Mendel’s Law, the Law of Heredity discovered by Johann Gergot Mendel, was first published in 1865, although it was overlooked until De Vries called attention to Mendel’s remarkable results in 1900. Mendel’s Law proved that offspring inherit, produce, and exhibit the characteristics of the parents according to their dominant and recessive characteristics. This makes possible the breeding of a great variety within a species and eliminated the belief in hybridized animals. The law is based on the fact that the sperm of the male carries all the ancestry of the male, and the ovum the same for the female. What is done to change variety has to be done to the genes that carry the specific physical differences.

Each genera, or “kind,” has a different number of self-perpetuating chromosomes and cannot be intermated with another. We now know the human cell has forty-six chromosomes, with each parent providing twenty-three toward the makeup of their offspring. Thus, all living things perpetuate their “likeness” through their offspring.

LIFE BEGETS LIFE

BIBLE WRITERS

1491–1451 B.C.

As Moses recorded, “God created the great sea-monsters, and every living creature that moves, with which the waters swarmed, after their kind, and every winged bird after its kind” (Gen. 1:21).

“And God created man in His own image, in the image of God He created him; male and female He created them” (Gen. 1:27).

A.D. 96

The Lord God Almighty was praised in heaven by song, “Worthy art Thou, our Lord and our God, to receive glory and honor and power: for thou didst create all things, and because of Thy will they existed and were created” (Rev. 4:11).

HISTORY OF SCIENCE

350 B.C.

All Greek philosophers held with the Aristotelian dictum that “eggs” of all lower animals are formed out of rotting substances. It was out of this corruption that insects originated. Frogs and other small sea life had their origin in the slime in pools or seawater. This idea, which persisted for centuries, became known as the Spontaneous Generation Theory.

A.D. 1626–1698

An Italian, Francesco Redi, disproved that spontaneous generation applied to insects. He saw that flies were attracted to rotten meat, so he covered some with parchment and left some open in pans. He observed that flies were attracted to both. No eggs were on the parchment even though the smell came through and attracted flies. Eggs did appear on the open meat, and thus maggots came out. Therefore, Redi concluded, flies come only from matched eggs of other flies. Subsequently, the theory was limited to the microbes found through Leeuwenhoek’s invention of the microscope in 1676.

A.D. 1862

Louis Pasteur won first prize from the French Academy of Sciences in 1862 for the project defined as “Attempt by means well devised, experiments to throw new light on the question of spontaneous generation.” His research efforts proved once and for all that there is no spontaneous generation but that all living things are a product of living matter.

A.D. 2002

Scientists have not, and cannot, develop life from nonliving matter. The Law of Biogenesis, which states that life begets life, still shows that only He who eternally has Life and Power and Intelligence can create life.

As of yet, the attempts to create life from dead matter in a laboratory have not met with the satisfaction of the scientific community. It never will. Only that which has life can create life, and the eternal God passed life to His Creation.

WATERS TEEM WITH SWARMS OF LIVING CREATURES

BIBLE WRITERS

1491–1451 B.C.

Moses stated, “The waters teem with swarms of living creatures” (Gen. 1:20).

ANALYSIS: The translated meaning of “creatures,” from the Hebrew word *sherets*, is “a rapidly multiplying active mass of minute animals.”

FACT: Moses revealed that “waters teem with swarms of living creatures” that are rapidly multiplying minute animals.

HISTORY OF SCIENCE

A.D. 1676

Leeuwenhoek’s hobby was grinding bits of glass into powerful lenses. In his attic laboratory he perfected the technique so that he was able to magnify objects as much as 270 times. Constantly curious, he caught a raindrop one rainy day and, looking at it through his microscope, could not believe what he saw. He called to his daughter, “See what I see, Maria? There are little animals in this rain water!”

It was not until this development of the microscope by Leeuwenhoek that man could see “waters teem[ing] with swarms of living” and rapidly multiplying creatures. No sea life known or recorded by man had ever been described as such, not until the eye viewed water aided by a microscope. In fact, it would be difficult to better portray what is seen in water through a powerful microscope.



Figure 6.1 Water Teems With Creatures

Every drop of water in plant, spring, or animal contains colonies of life. A typical example would be protozoa spores that dry up and are in the air, earth, etc. When they become wet they come to life and will hatch. One species that lives sixty hours matures in twelve and reproduces an average of sixty young every twelve hours. At the death of the parents, there would be 55,411,260 descendants.

ALL FLESH IS NOT THE SAME

BIBLE WRITERS

A.D. 56

The apostle Paul wrote, "All flesh is not the same flesh; but there is one flesh of men, and another flesh of beasts, and another flesh of birds, and another of fish" (1 Corin. 15:39).

ANALYSIS: The word for "flesh" in Hebrew simply denotes "meat."

FACT: Paul noted that all flesh is not the same and recorded four types: men, beasts, birds, and fish.

HISTORY OF SCIENCE

A.D. 1838

Men had always believed that flesh, or meats, were for the most part the same. Matthias J. Schleiden (1838), and especially Theodore Schwann (1839), established the cell theory, recognizing the cell as a unit of structure in both plants and animals. Having only the use of the light microscope, these men and their contemporaries could not make close and accurate observations of individual cells. Their conclusion, therefore, stated that all cells of a common substance, such as meat, were identical and did not originate from other cells. The common cell theory was held for years. This single-cell type was considered to be the common building block of all life, thus giving further argument to the theory that all flesh is the same. It was argued that all meat had the same construction, built of these common cells.

A.D. 1930

It took the electron microscope, invented by Max Knott and Ernst Ruska in the early 1930s, to give science the tool it needed to look into cell structure. The best light microscope could not reveal structure below $\frac{1}{100,000}$ of an inch. In 1930, the original electron microscope enlarged this by one hundred times. The work done with this instrument, plus improved killing fluids and machines that slice cells into sections, disproved the common cell theory. Individual cell structure can now be shown clearly. Scientists discovered that there are

many different types of cells, rather than one basic cell. These cells differ radically in structure, chemical composition, methods of eating, methods of reproduction, and purpose. A piece of flesh can now be analyzed accurately enough to tell its species.

A.D. 1965

The first electronic microscope providing three-dimensional topographic images was completed through the efforts of Sir Charles Oakley. The combination light-electron microscope was developed and could focus images to $1/2,000,000$ of an inch, thus defining the differences among cells even more clearly.

A.D. 1981

The development of the scanning tunneling microscope now can explore atomic feature on an atom-to-atom basis. The differences in cell structures can now be appreciated in their detailed atomic images.

It is interesting to note that modern science's division of animal life is man, beast, fish, and fowl, just as Paul described.

LIFE IS IN THE BLOOD BIBLE WRITERS 1491–1451 B.C.

Moses wrote, "The life of the flesh is in the blood" (Lev. 17:11).

ANALYSIS: The Hebrew word for "life" is defined as "that which makes it possible for an animal to breathe; to have vitality."

FACT: Moses pronounced, "The life of the flesh is in the blood."

HISTORY OF SCIENCE 350 B.C.

Bloodletting as a medical practice has been known as early as the fourth century B.C. Herophilos, a physician of the Museum at Alexandria, advocated it as a means to rid the body of disease. Many of his contemporaries also used it as a cure, considering blood a carrier of *disease* instead of *life*.



Figure 6.2 Life Is in the Blood

A.D. 1616

The practice of bloodletting was later based on the accepted belief that blood did not circulate but would “ebb and flow,” with new blood being created rapidly if needed. The monumental discovery by William Harvey, a British physician, in 1616 that blood circulated continually through the veins to be used over and over again has enabled man to make exact studies of the circulation system and the function of blood.

A.D. 1800

Dr. Harvey’s discovery did not yet have popular acceptance, and the practice of bloodletting continued. The barber-surgeons of this country were the professional bloodletters until the early nineteenth century,

hence the origin of the red stripe on their barber poles with a blood collecting pot at its bottom. A conscientious barber-surgeon would bleed a person to free him of disease from both arms, supposedly to not off-balance his weight. This was done while trimming the patient's hair.

A.D. 1900

The preeminent importance of the blood as the biological mechanism of the body has only been comprehended with any adequacy in recent years. In this century, scientists discovered that the continuance of life depends on continued temperature control, waste removal, and transportation of water, food, and regulators to the cells of all parts of the body, and therefore the blood furnishes the very life and nourishment of the body.

MANKIND IS OF ONE ORIGIN

BIBLE WRITERS

A.D. 63

Luke quoted Paul as speaking of God, "He made of one every nation of mankind to live on all the face of the earth" (Acts 17:26).

FACT: Paul stated that men of every nation are of one origin.

HISTORY OF SCIENCE

A.D. 1775

Until 1775 there were considered to be five distinct original races based on skin color as outlined by Johann Friedrich Blumenback, the founder of anthropology. These races were considered to be perpetuated by the differences in the blood of each. Although later anthropologists developed other systems to determine original races, such as body characteristics, languages, location, etc., few could agree as to what and how many original pure races there were.

A.D. 1900

In 1900 Karl Landsteiner discovered that all human blood has a common base—plasma. It was learned that blood could be divided into four basic types, differing in the types of cells carried in the plasma. Comparative studies of people in different lands have shown that

human populations all over the world contain almost equal proportions of all four blood types.

The race concept of classical anthropology and biology proved unsatisfactory because it was based on the “blood line” theory of inheritance, which assumes that heredity is transmitted from parents to offspring through blood. “Although this theory was invalidated by the discovery of Mendel’s Laws of heredity it continues to be credited almost universally by laymen, and even colors the thinking of some scientists.”⁶ As already noted, modern genetics shows that heredity is transmitted through discrete genes.

It is now scientifically evident that all races of men are biologically similar, so that all known variations in mankind are possible within the human cell structure. As already noted, the human cell with its forty-six chromosomes differs completely from every other living thing. Therefore, applying Mendel’s law of the offspring inheriting the characteristics only of its ancestors, most scientists conclude that all men have one common ancestor.

A.D. 1985

Scientists studying the DNA of many old and current civilizations discovered that all women have one set of genes in common. This implied that all women have one common ancestor, to whom scientists gave the name “Eve.” It has since been further discovered that all men have a common DNA Y sex gene, which has led scientists to nickname man’s one common ancestor “Adam.” It seems the only thing they have wrong is their setting a date of about fifty thousand years ago for the first male and female of the human race—Adam and Eve—to have lived.

HEALTH AND SANITATION

BIBLE WRITERS

1491–1451 B.C.

Through Moses God gave the Israelite nation many laws regarding health and sanitation. For our purpose of examination, Moses’ writings will be divided into the following three categories:

6. Theodosius Dobzhansky, “Races, Nature, and Origins Of,” *Encyclopedia Americana*, Vol. 23, 1957 ed., p. 109.

I. FOOD CONTAMINATION

Leviticus 11:32–40, speaking of animals: “Anything on which one of them may fall when they are dead, becomes unclean, including any wooden article, or clothing, or a skin, or a sack--any article of which use is made--it shall be put in the water and be unclean until evening, then it becomes clean. As for any earthenware vessel into which one of them may fall, whatever is in it becomes unclean and you shall break the vessel. Any of the food, which may be eaten, on which water [body fluids] comes, shall become unclean; and any liquid which may be drunk in every vessel shall become unclean. Everything, moreover, on which part of their carcass may fall becomes unclean; an oven or a store shall be smashed; they are unclean and shall continue as unclean to you. Nevertheless a spring or a cistern collecting water shall be clean, though the one who touches their carcass shall be unclean. And if a part of their carcass falls on any seed for sowing which is to be sown, it is clean. Though if water is put on the seed, and a part of their carcass falls on it, it is unclean to you. Also if one of the animals dies which you have for food, the one who touches its carcass becomes unclean until evening. He too, who eats some of its carcass shall wash his clothes and be unclean until evening; and the one who picks up its carcass shall wash his clothes and be unclean until evening.”

Leviticus 7:19: “Also the flesh that touches anything unclean shall not be eaten; it shall be burned with fire.”

Leviticus 7:26: “And you are not to eat any blood, either of bird or animal, in any of your dwellings

II. SANITATION

- A. Leviticus 17:13b: “When any man in hunting catches a beast or a bird which may be eaten, he shall pour out its blood and cover it with earth.”
- B. Deuteronomy 23:12–13: “You shall also have a place outside the camp and go out there, and you shall have a spade among your tools, and it shall be when you sit down outside, you shall dig with it and shall turn to cover up your excrement.”

III. SICKNESS

- A. Chapters 13 and 14 of Leviticus contains the laws for identification, isolation, and control of leprosy:

Leviticus 13:14–17: “But whenever raw flesh appears on him, he shall be unclean. And the priest shall look at the raw flesh, and he shall pronounce him unclean; the raw flesh is unclean, it is leprosy. Or if the raw flesh turns again and is changed to white, then shall he come to the priest, and the priest shall look at him, and behold, if the infection has turned to white, then the priest shall pronounce clean him who has the infection; he is clean.”

Leviticus 13:45–46: “As for the leper who has the infection, his clothes shall be torn, and the hair of his head shall be uncovered, and he shall cover his mustache and cry Unclean! Unclean! He shall remain unclean all the days during which he has the infection; he is unclean. He shall live alone; his dwelling shall be outside the camp.”

Leviticus 13:52: “So he shall burn the garment, whether the warp of the woof, in wool or linen, or any article of leather in which the mark occurs, for it is a leprous malignancy; it shall be burned in the fire.”

Leviticus 14:8, 9: “The one to be cleansed shall then wash his clothes and shave off all his hair, and bathe in water and be clean. Now afterward, he may enter the camp, but he shall stay outside his tent for seven days. And it will be on the seventh day that he shall shave off all his hair: he shall shave his head and his beard and his eyebrows, even all his hair. He shall then wash his clothes and bathe his body in water and be clean.”

Leviticus 14:39–47: “And the priest shall return on the seventh day and make an inspection. If the mark has indeed spread in the walls of the house, then the priest shall order them to tear out the stones with the mark in them and throw them away at an unclean place outside the city. And he shall have the house scraped all around inside, and they shall dump the plaster that they scrape off at an unclean place outside the city. Then they shall take other stones and replace those stones; and he shall take other plaster and replaster the house. If, however, the mark breaks out again in the house, after he has torn out the stones and scraped the house,

and after it has been replastered, then the priest shall come in and make an inspection. If he sees that the mark has indeed spread in the house, it is a malignant mark in the house; it is unclean. He shall therefore tear down the house, its stones, and its timbers, and all the plaster of the house, and he shall take them outside the city to an unclean place. Moreover, whoever goes into the house during the time that he has quarantined it, becomes unclean until evening. Likewise, whoever lies down in the house shall wash his clothes, and whoever eats in the house shall wash his clothes.”

- B. Chapter 15 of Leviticus provides laws concerning those individuals who have running issues of fluids that come from the body:

Leviticus 15:7–8: “Also whoever touches the person with the discharge shall wash his clothes and bathe in water and be unclean until evening. Or if the man with the discharge spits on one who is clean, he too shall wash his clothes and bathe in water and be unclean until evening.”

Leviticus 15:11–13: “Likewise, whomever the one with the discharge touches without having rinsed his hands in water shall wash his clothes and bathe in water and be unclean until evening. However, an earthenware vessel, which the person with the discharge touches shall be broken, and every wooden vessel shall be rinsed in water. Now when the man with the discharge becomes cleansed from his discharge, then he shall count off for himself seven days for his cleansing; he shall then wash his clothes and bathe his body in running water and shall become clean.”

ANALYSIS

I. REGARDING FOOD CONTAMINATION, MOSES GAVE THE FOLLOWING RESTRICTIONS:

- A. When rodents, lizards, or creeping things died and touched any implement, vessel, or raiment, the things made from earth or clay were to be destroyed while the rest could be washed in water to be made clean.
- B. When that classified as “unclean” touched food or drink, the meat was to be burned, drink poured out, and the rest properly disposed of.

- C. Moses forbade the people to eat the blood of any animal and ordered the proper bleeding of animals at their death and the disposal of the blood.

II. LAWS OF SANITATION CALLED FOR THE BURIAL OF ANIMAL BLOOD AND HUMAN EXCRETA.

III. MOSES GAVE COMPREHENSIVE LAWS CONCERNING SICKNESS. THESE INCLUDED LAWS FOR THOSE HAVING LEPROSY OR THOSE WITH OPEN SORES OR SKIN LESIONS.

- A. Recognition of infected individuals.
- B. Quarantine or isolation.
- C. The wearing of a mask over the mouth and nose.
- D. The “uncleanness” of anything touched by these people.
- E. To “clean” oneself included bathing of the body and clothes in running water, and in some case the removal of all body hair first.
- F. When garments and buildings show signs that the disease cannot be arrested, then that portion or the entire object should be destroyed and removed from town.

FACT: Moses recorded laws comparable to modern health and sanitation practice in most civilized countries.

HISTORY OF SCIENCE

A.D. 1350

The word “quarantine” originated when the Italian ports of Venice and Genoa first refused admission to immigrants, arriving by boat, who might be harboring plague and required them to stay on board for forty days.

A.D. 1676

The beginning of microbiology began when Leeuwenhoek invented the microscope and in the same year published his discovery.

A.D. 1700

Leprosy spread over southern Europe in the seventeenth and eighteenth centuries, until in a desperate effort the instructions of Moses were reenacted successfully.⁷

A.D. 1855

Pasteur, in experimenting with molds, discovered bacteria, thus ushering into science the significant field of bacteriology.

A.D. 1892

“Conclusive evidence of the actual existence of such infectious matter (viral) dates only from 1892.”⁸ Louis Pasteur was one of the first to use the information. Slowly, the medical community in the more advanced nations began to use scientific reasons for adopting the strict health code that Moses decreed.

TODAY

The world medical community realizes the health value found in Moses' laws of health and sanitation. We have now established a level of preventive disease efforts enjoyed thirty-five hundred years ago by the ancient nation of Israel.

7. R. William, “Medical Science and the Bible,” *Modern Science and the Christian Faith*, Scripture Press, 1948, p. 244.

8. Sirks and Zirkle, *Evolution of Biology*, p. 273.

7

PROPHECY, ARCHAEOLOGY, AND HISTORY



Our world is dotted with the sites of ancient cities that are found recorded in the Bible. These archaeological sites give visible testimony for the inspiration of the Biblical writers. Their writings contain many prophecies of God directed toward some of the important countries and cities of their time. Now we have very old copies of their prophetic writings, such as the Septuagint and the Dead Sea Scrolls, which are known to have existed long before the actual fulfillment of some of these prophecies occurred and became events of history. Yes, these are provable today. They stand as indisputable monuments to the Bible's inspiration.

Archaeological expeditions have explored the ruins of ancient cities with the consistent result of proving the historical and prophetic accuracy of the Bible writers. It is true that some prophecies lack evidence to prove that they were written either before or after the actual event spoken of had occurred. But, what is the modernist doing with those that can be proven true prophecies? He is observed doing the same as men did nineteen centuries ago when some, who witnessed the very miracles of Jesus, rejected the obvious conclusion of this evidence because of their pride, jealousy, position, etc.

The ability to prophesy is a definite test of a man's inspiration. "Let them bring forth, and declare to us what is going to take place, or announce to us what is coming. Declare the things that are going to come afterward, that we may know that you are gods" (Isa. 41:22-23). "No prophecy was ever made by an act of human will, but men moved by the Holy Spirit spoke from God" (2 Pet. 1:2). No more tangible proof could be provided that God IS than for God to prophecy in writing the details of notable events that He would cause long before they



Figure 7.1 Map of Cities of Prophecy

occur. Centuries after the world had copies of these declarations, He brought about the specific events prophesied precisely as written!

“Thus says the Lord, the King of Israel and his Redeemer, the Lord of hosts: ‘I am the first and I am the last, and there is no God besides Me. And who is like Me? Let him proclaim it; let them declare to them the things that are coming and the events that are going to take place. Do not tremble and do not be afraid; have I not long since announced it to you and declared it? And you are My witnesses. Is there any God besides Me, or is there any other Rock? I know of none’” (Isa. 44:6–8). The early Christians used prophecy to sustain and prove that their religion was from God. We also have the same obligation to the world today. You must “always be ready to make a defense to every one who asks you to give an account for the hope that is in you” (1 Pet. 2:15).

CITY OF SAMARIA BIBLE WRITERS

750 B.C.

“For I will make Samaria a heap of ruins in the open country, planting places for a vineyard. I will pour her stones down into the valley, and will lay bare her foundations” (Mic. 1:6).

FACT: Prophetic events concerning the city of Samaria are summarized as follows:



Figure 7.2 Today Grapes and Olives Grow in Roadway

1. Its ruins would become a “heap of the field.” Places within the city would be cleared of ruins and the debris would be gathered into piles, similar to the “heaps” created in the clearing of farmland.
2. In clearing the site, the building stones would be pushed off the terraces into the valley below.
3. Even the foundations of buildings and roadbeds would be dug up in an effort to clear land for planting.
4. Eventually Samaria would be planted in vineyards.

HISTORY

880 B.C.

The city of Samaria was built as the capital of the northern kingdom of Israel. King Omri built it on isolated Mt. Sameron, which is completely surrounded by an almost circular valley. Mt. Sameron was terraced around for building sites, from the valley floor to an elevation of about four hundred feet.



Figure 7.3 Ahab's Palace Being Excavated

27 B.C.

Samaria was occupied in the days of Jesus. Herod the Great beautified the city, including the construction of palaces and temples.

A.D. 1265

Moslems defeated the Crusaders defending Samaria and totally destroyed it, and it has never been rebuilt.

A.D. 1960

The Israeli government owns all land in today's Israel. All living on or using land in Israel must make that leased land produce profit for taxes or give up its use. Arabs living in their ancestral homes on Mt. Sameron cleared much of the old city's ruins to convert the ancient site to agricultural purposes in order to abide by the law and keep their land. In clearing the land they dug up building foundations and roadways, either piling the rubble in heaps or dumping it down to the lower terraces, and eventually to the valley floor.

In the second terrace from the top stand the remaining pillars of a colonnade, built by Herod the Great, that once extended around the

hill for a distance of one thousand yards. Now grapevines and olive trees can be seen growing in many clearings, including the roadway between the columns.

NOTE: Usually ancient cities were built upon the ruins of their predecessor. After rebuilding Samaria eight times, God stopped the rebuilding and caused the site to be converted back to agricultural use.

CITIES OF EDOM

BIBLE WRITERS

600 B.C.

“Bozrah will become an object of horror, a reproach, a ruin and a curse; and all its cities will become perpetual ruins. And Edom will become an object of horror; everyone who passes by it will be horrified and will hiss at all its wounds” (Jer. 49:13, 17).

500 B.C.

“Thus says the Lord God, ‘I will also stretch out My hand against Edom and cut off man and beast from it. And I will lay it waste; from Teman even to Dedan they will fall by the sword’” (Ezek. 25:13).

“Behold, I am against you, Mount Seir, and I will stretch out My hand against you, and will make you a desolation and a waste. I will lay waste your cities, and you will become a desolation. . . . And I will make Mount Seir a waste and desolation, and will cut off from it the one who passes through and returns. . . . I will make you an everlasting desolation, and your cities will not be inhabited. Then you will know that I am the Lord” (Ezek. 35:3, 4, 7, 9).

FACT: The following summarizes prophecy concerning the cities of Edom:

1. All the cities of Edom in the Seir Mountain range would become a perpetual desolation, from the city of Teman in the north to Dedan in the south.
2. The ruins would become an astonishment to those who viewed them.
3. The ancient famous caravan route along the King’s Highway, which used these cities as trading places and stations, would cease.



Figure 7.4 Site of Abandoned City of Edom

HISTORY

A.D. 300

The trade route, which was of great importance, was the King's Highway running between Syria and Arabia. In 300 the trade route shifted north on a new highway through the city of Palmyra.

A.D. 632

The once strong city of Petra was conquered and destroyed by Mohammedans and disappeared from the annals of human history with even its site unknown for centuries.

A.D. 1188

The remaining original cities of Edom lying between Teman and Dedan fell in 1188 before the armies of Arab Saracen Saladin and were left wasted and in ruins.

A.D. 1812

The now famous ruins of Petra were discovered in 1812 by Burchard and, because of their state of preservation, are one of the most aston-



Figure 7.5 Site of Petra

ishing archaeological sites known. Expeditions have located most of the sites of the other cities.

TODAY

All the ancient cities of Edom located in Mount Seir have stood desolate for centuries.

NOTE: These silent sites remain as perpetual astonishments like dead men's bones, intentionally unburied, bleaching in the sun. They forever remain a testimony from God to the living of a past people who were destroyed for their wickedness.

CITIES OF GAZA AND ASHKELON

BIBLE WRITERS

800 B.C.

“The remnant of the Philistines will perish,’ says the Lord God” (Amos 1:8).

630 B.C.

“For Gaza will be abandoned, and Ashkelon a desolation; So the sea-coast will be pastures, with caves for shepherds and folds for flocks” (Zeph. 2:4, 6).

600 B.C.

“Baldness has come upon Gaza; Ashkelon has been ruined” (Jer. 47:5).

FACT: The following summarizes prophecy concerning the cities of Gaza and Ashkelon:

1. The Philistines, as a people, would perish.
2. One of their capital cities—Gaza—would be forsaken, and “baldness” would come upon it.
3. Ashkelon, another of their capital cities, would also become desolate. But, it and its seacoast would become the dwelling place of shepherds with their sheepfolds.

HISTORY

600 B.C.

These prophecies were made when the Philistines were one of the most powerful nations in the area. The name *Palestine* means “Land of Philistines.”

96 B.C.

The Maccabees of Israel, led by Alexander Jannaeus, completely exterminated the Philistines in a series of seventeen battles.

A.D. 1270

Ashkelon had existed for more than twenty-five hundred years as a major coastal city. Herod the Great had built a large summer resort



Figure 7.6 Gaza Is Buried Under a Sand Dune

there. This city was destroyed by Sultan Bibars in A.D. 1270 and has never been rebuilt.

A.D. 1921

An archaeological exploration group found Old Gaza buried under a large dune of sand along the Mediterranean coast.

TODAY

The Philistines are the only ancient race of people of the area, from among about twenty races, who were so completely destroyed that they have no descendants among today's nations.

Today the vicinity of Ashkelon no longer has the traditional fields of grain, but shepherds use the remains of old structures to build sheepfolds and shepherd hovels. The city and its seacoast are otherwise desolate. Gaza truly remains desolate, being completely covered with sand. Such a dune of sand is a fitting description for "baldness has come upon Gaza." The most troublesome people to ancient Israel were the Philistines. Now, among all the former races, they alone have disappeared. Out of the five major Philistine capitals, one has become a large sand dune, one deserted and salvaged for pasture fences and



Figure 7.7 Shepherds at Ashkelon

hovels, while the remaining three are populated today with another people. The prophetic accuracy is phenomenal!

CITY OF BABYLON

BIBLE WRITERS

700 B.C.

“And Babylon, the beauty of kingdoms, the glory of the Chaldean’s pride, will be as when God overthrew Sodom and Gomorrah. It will never be inhabited or lived in from generation to generation; nor will

the Arab pitch his tent there, nor will shepherds make their flocks lie down there. But desert creatures will lie down there, and their houses will be full of owls, ostriches also will live there, and shaggy goats will frolic there. And hyenas will howl in their fortified towers and jackals in their luxurious palaces” (Isa. 13:19–22).

“I will also make it a possession for the hedgehog, and swamps of water, and I will sweep it with the broom of destruction” (Isa. 14:23).

“And the unassailable fortifications of your walls He will bring down, lay low, and cast to the ground, even to the dust” (Isa. 25:12).

600 B.C.

“Behold, she shall be the least of the nations, a wilderness, a dry land, and a desert. Because of the wrath of Jehovah she shall not be inhabited, but she shall be wholly desolate” (Jer. 50:12, 13).

“Behold, I am against you, O destroying mountain, and I will make you a burnt out mountain. And they will not take from you even a stone for a corner nor a stone for foundations, but you will be desolate forever, declares the Lord” (Jer. 51:25, 26).

“And I shall dry up her sea and make her fountain dry. And Babylon will become a heap of ruins, a haunt of jackals, an object of horror and hissing, without inhabitants. The sea has come up over Babylon; she has been engulfed with its tumultuous waves. Her cities have become an object of horror, a parched land and desert, a land in which no man lives” (Jer. 51:36, 37, 42).

FACT: The following summarizes prophecy concerning the city of Babylon:

1. The city of Babylon would become ruins and be perpetually uninhabited. The Arabian would not make his camp there or graze sheep there, and the caravans would not pass through it.
2. Wild beasts would live in the palaces and houses.
3. Its protective moat, a man-made sea extending from the Euphrates River outside the city walls up to a distance of sixty-four miles, would become dry; yet pools of water would cover portions of the city within the walls.
4. Her stones would not be taken for other buildings, but she would become heaps, the walls broken down, the ziggurat burned, and the



Figure 7.8 Babylon, Hanging Gardens, Moat

famous Hanging Gardens on the man-made mountain of stone, known as one of the Seven Wonders of the World, destroyed.

5. Babylon would remain a perpetual desolation and astonishment. Her exceedingly fertile valley would become a dry parched wilderness and desert.

HISTORY

A.D. 100

Due to several lack of sufficient rain over several previous centuries, the Euphrates River became saline. This river-borne salt eventually destroyed the fertility of the land for miles around the city of Babylon, and the city dwindled in population.



Figure 7.9 Gate into Babylon

A.D. 412

The elaborate network of canals built to assure great productivity to the nation and to control flooding of the Euphrates River had slowly become filled in due to lack of maintenance, thus causing the whole area to lack drainage and become swampy.

A.D. 460

In 460, the historian Theodoret traveled to the city of Babylon and recorded that there were no longer any Assyrians or Chaldeans living there, only a few Jews. Shortly afterwards, the city became deserted.



Figure 7.10 A Woman Standing on One Side of City Wall

A.D. 1000

The Euphrates River changed its course from the canal passing through the center of the city to a new route many miles to the east, thus causing the man-made sea to dry up.

A.D. 1250

Benjamin of Tudela visited the site and found nothing but utter desolation. The palace, which was partially under water and infested by scorpions and serpents, was inaccessible.

TODAY

The city of Babylon is desolate except for wild animals seen living among the ruins. As the walls of the buildings in the city deteriorated, the mortar poisoned the soil with nitrous compounds. Due to the soil's deterioration, and local superstition, the Arabs will not camp or graze flocks near the ancient city. For more than four thousand years, the city of Babylon was on a major trade route, but no longer.

Babylon is acclaimed to be the oldest and once the most beautiful city in the world. It now lies stripped of its life and beauty. Other than



Figure 7.11 Ruins of the City of Babylon

normal erosion and weathering, the city exists today with its bridges, buildings, and walls as it did two thousand years ago. The walls, some of which once stood 300 feet high and 80 to 120 feet thick, were made out of brick and have weathered down completely in places (Figures 7.10 and 7.11). The stones of the famous ziggurat still show signs of having been burned with intensive heat as was prophesied. The building materials of the city were not removed and used again, as is customary.

Over the centuries, the rising water table in the plain has caused one-quarter of the city to be under pools of water and swamps, rendering much of the remains of earlier centuries inaccessible.

Today the famous ruins of the fourteen-mile square city of antiquity lie desolate in southern Iraq.

NOTE: The fall of the greatest, oldest, and most splendid city in the world attests to the exactness of God's prophecies. Alexander the Great attempted to rebuild the city and died there the night he announced his grand plan. The now-deposed ruler of Iraq, Saddam Hussein, had promised to rebuild Babylon and started the rebuilding by spending more than one billion dollars. Having become completely desolate,

Babylon remains as a monument of God's providence in the affairs of men. If God caused the strongest capital city known to fall in one night, then he can do the same again to any nation that increases in sin.

CITY OF TYRE
BIBLE WRITERS
550 B.C.

“Thus says the Lord God, ‘Behold I am against you, O Tyre, and I will bring up many nations against you, as the sea brings up its waves. And they will destroy the walls of Tyre and break down her towers; and I will scrape her debris from her and make her a bare rock. She will be a place for the spreading of nets in the midst of the sea, for I have spoken,’ declares the Lord God” (Ezek. 26:3–5).

“They will make spoil of your riches and a prey of your merchandise, break down your walls and destroy your pleasant houses, and throw your stones and your timbers and your debris into the water. And I will make you a bare rock; you will be a place for the spreading of nets. You will be built no more, for I the Lord have spoken. . . . I shall bring terrors on you, and you will be found no more: though you will be sought, you will never be found again,’ declares the Lord God” (Ezek. 26:12, 14, 21).

FACT: The following summarizes prophecy concerning the city of Tyre:

1. Many nations, as waves of the sea, would come against Tyre.
2. The walls and buildings would be torn down and cast into the water. All the stone, timber, and even the soil down to bedrock was to be covered by the sea.
3. The city site would be made a bare rock and used perpetually as a place for the spreading and repair of fishing nets.
4. The city of Tyre would cease to exist.

HISTORY
586 B.C.

The rich and famous city of the seafaring Phoenicians, Tyre, came under siege by Nebuchadnezzar, king of Babylon. After thirteen years of land siege, the Phoenicians built a second and smaller city on an



Figure 7.12 Fishermen Mending Nets at Tyre

island one-half mile out in the Mediterranean Sea. Using their ships, they removed themselves from the threat of the Babylonian Empire, leaving their once beautiful capital stripped and deserted. Its ruins seemed to contest Ezekiel's prophecy. Who would be foolish enough to throw all the city's debris and soil into the sea? What use would such an undertaking be?

322 B.C.

Alexander the Great conquered the coastal cities to acquire their navies and sent them against the new city of Tyre in constant waves. Judging this procedure too slow, he had his army build a causeway the width of two chariots from the shore of the old city to the island of the new Tyre. He ordered all building materials from the original city to be collected and placed in the sea to make this causeway. When the quantity of stone and timber proved insufficient, he ordered the ground scraped down to bedrock to provide fill dirt and thus finished the causeway. He then marched his army over the causeway to defeat the Phoenicians and destroy their new city, ending his seven-month siege.



Figure 7.13 Remnants of Causeway at Tyre Site

TODAY

The city God spoke against through His prophets is now a large bare rock. For centuries fishermen have used the site to spread and mend their nets. The stone, timbers, and dirt of that city lie in the water with part of the causeway still visible (Figure 7.13). Other than historical records, there is little evidence that one of the world's richest cities ever existed on the above site. The city is gone and can never be found again.

NOTE: A nation strong enough to withstand the siege of mighty Babylon was brought down through a series of specific events that had been foretold by prophets. Today about five thousand descendants live in shacks on the backside of the island where the capital had been moved twenty-three centuries ago, while the ancient site of their once-famous capital is strewn with ever-present fishing nets.

SEEING IS BELIEVING!

Visit a library or use the Internet and see for yourself the condition of these city sites God spoke against so long ago through His prophets. Compare them to the statements in your Bible. An individual with a good heart who is searching for the truth will hold God in awe as his Creator. Are you one of the "few" Jesus spoke of?

8

BIBLE TELLS ITS ORIGIN AND AUTHORITY



BIBLE'S METHOD OF REVELATION

If the preceding pages convinced you that the ancient Bible writers obtained scientific and historical information beyond their human ability, then you will be interested in the writers' account of the origin of this information that follows.

GOD'S ENTIRE MESSAGE TO MAN HAS BEEN WRITTEN

John 16:16: "When he, the Spirit of Truth, is come, he shall guide you into *ALL THE TRUTH*."

I Timothy 3:16-17: "All scripture is inspired by God and profitable for teaching, for reproof, for correction, for training in righteousness; that the man of God may be adequate, equipped for *EVERY* good work."

II Peter 1:3: "Seeing that His divine power has granted to us *EVERYTHING* pertaining to life and godliness, through the true knowledge of Him who called us by His own glory and excellence."

Jude 3: "I felt the necessity to write to you appealing that you contend earnestly for the faith which was *ONCE* for all delivered to the saints."

THINGS MAN IS FORBIDDEN TO DO TO GOD'S PERFECT AND COMPLETE REVELATION Cannot Add to It

I Corinthians 4:6: "That in us you might learn *NOT TO EXCEED* what is written."

II John 9: "Any one who *GOES TOO FAR* and *DOES NOT ABIDE* in the teaching of Christ, does not have God; the one who abides in the teaching, he has both the Father and the Son."

Revelation 22:18: "I testify to everyone who hears the words of the prophecy of this book: if anyone *ADDS* to them, God shall add to him the plagues which are written in this book."

Cannot Subtract from It

Revelation 22:19: "If anyone *TAKES AWAY* from the words of the book of this prophecy, God shall take away his part from the tree of life and from the holy city."

Cannot Change It

Galatians 1:6-9: "I am amazed that you are so quickly deserting Him who called you by the grace of Christ, for a *DIFFERENT GOSPEL*; which is really not another; only there are some who are disturbing you, and want to *DISTORT* the gospel of Christ. But even though we, or an angel from heaven, should preach to you a gospel contrary to that which we have preached to you, let him be accursed. As we have said before, so I say again now, if any man is preaching to you a gospel contrary to that which you received, let him be accursed."

CONCLUSION: THE ABOVE FORBIDS MAN FROM DOING
ANYTHING WITH THE BIBLE OTHER THAN TO USE IT AS
ABSOLUTE AUTHORITY AND TO OBEY IT.



INHERENT AUTHORITY because He originated the universe
Genesis 1:1, "In the beginning God created the heavens and the earth."

DELEGATED AUTHORITY from God

Matthew 28:18, "All authority has been given to Me in heaven and on earth."

1 Corinthians 15:27, "He has put all things in subjection under His feet."

TAUGHT AND GUIDED by apostles

John 14:26, "The Holy spirit, whom the Father will send in My name, He will teach you all things, and bring to your remembrance all that I have said to you."

John 16:13, "But when He, the Spirit of truth, comes, He will guide you into all the truth; for He will not speak on His own initiative, but what ever He hears."

1 Corinthians 2:10-13, "For to us God revealed them through the Spirit; for the Spirit searches all things, even the depths of God. For who among men knows the thoughts of a man except the spirit of the man, which is in him? Even so the thoughts of God no one knows except the Spirit of God. Now we have received, not the spirit of the world, but the Spirit who is from God, that we might know the things freely given to us by God, which things we also speak, not in words taught by human wisdom, but in those taught by the Spirit, combining spiritual thoughts with spiritual words."

DELEGATED AUTHORITY from Christ

John 17:8, "The words which Thou gavest Me I have given to them: and they received them."

John 20:21, "Jesus therefore said to them . . . 'As the Father has sent Me, even so I send you.'"

John 13:20, Jesus said, "Truly, truly, I say to you, he who receives whomever I send receives Me."

Galatians 1:1-12, "For I would have you know, brethren, that the gospel which was preached by me is not according to man. For I neither received it from man, nor was I taught it, but I received it through a revelation of Jesus Christ."

WRITTEN by the apostles and prophets

Ephesians 3:3-5, "Paul wrote, "By revelation there was made known to me the mystery, as I wrote in brief. And by referring to this, when you read you can understand my insight into the mystery of Christ, which in other generations was not made known to the sons of men, as it has now been revealed to His holy apostles and prophets in the Spirit."

Figure 8.1 The Bible's Authority

9

GOD'S ACCOUNT OF CREATION



God has graciously given us knowledge pertaining to the origin and purpose of His Creation. These truths are intended to give hope and satisfaction to the minds of those who respect God. He has spoken through His prophets and Son that we might have answers to the age-old questions concerning human existence: Why? How? When? Only the inspired Word has our absolute confidence and therefore will be used to resolve these questions. By contrast, those who search using philosophy, science, or human reasoning will never resolve these questions or find agreement among themselves. The Creator Himself will be our teacher in this writing. Truth and faith “comes from hearing the word of God” (Rom. 10:17).

Why do men reject God's revelation? They are motivated by their desire to eliminate accountability to God and obedience to the laws in His Word. Their method is to discredit the Bible message, by claiming it is of human origin and offering their alternative answers to the Creation. This is why they refer to “Mother Nature,” believe in evolution, and live “doing it their way.” The apostle Paul describes such as not having “the love of the truth. . . . And for this reason God will send upon them a deluding influence so they might believe that which is false . . . not believing the truth, but taking pleasure in wickedness” (Thes. 2:10–12).

God's Word, history, and truth are unchangeable. Men's attempts to change these truths are futile. A Christian is a disciple, a student, a follower and believer in the Master Teacher. Right? Then consider how one could claim to be a Christian and yet call himself a “theistic evolutionist.” This is an impossible and hypocritical combination.

Consider the following:

- Truth #1: "God . . . has spoken to us in His Son . . . through whom also He made the world" (Heb. 1:1, 2). Christ was both teacher and Creator.
- Truth #2: "He was in the beginning with God. All things came into being by Him, and apart from Him nothing came into being that has come into being" (John 1:2, 3). He, as the Creator, was an eyewitness to creation, and in human form, as Jesus; He spoke of it.
- Truth #3: Jesus considered the Genesis account of Adam and Eve to be historical. When using it to teach, He rebuked His critics saying, "Have you not read?" (Matt. 19:4, 5).

QUESTION: Have you read? Do you agree with Jesus' claim that He is the creator of all things? Can one honestly disagree with His claim to be the world's builder and yet be His faithful disciple? The hypocrisy of such an idea is self-evident. A God-fearing man accepts God's account of the Creation and is thankful for the information. In opposition, the humanist, agnostic, atheist, and theistic evolutionist all substitute their own theories for our origin and purpose. If your answer is "Yes" to the question above, you are among the 50 percent whom Gallup polls (in 1971 and 1991) found believed in a recent Creation.

The foundation for our study will be the first two chapters of Genesis. Additional references from both the Old and New Testaments will be utilized, from the hundreds available. The thread of the Creation account extends from Genesis to the book of Revelation and reveals the planned origin and purpose of our existence. The credibility of Genesis was established earlier in this book, when we presented twelve of the thirty-one scientific evidences contained in the first two chapters of Genesis. We will proceed through our study by examining the events of the Creation in their chronological order as described in the first chapter of Genesis. The second chapter provides interesting details pertaining to some of those events.

THE DECISION BEFORE THE CREATION, "WHY?"

The letter to the Ephesians (Eph. 1:4b-5) provides the simple answer to man's quest for the purpose of our existence and all that we ob-

serve. Many, refusing to accept the Creator's right to exercise authority over their personal lives, have wrestled for the answer in vain. By denying the Biblical record of Creation, and supporting the theory of evolution, they diminish the concept of the Bible's inspiration and authority. They do this that they might justify their own way of life but, in the process, lose sight of life's true purpose and value. Let us begin by examining the inspired answer to the question concerning the purpose of the Creation as recorded in Ephesians 1:4b-5.

THE SETTING: Preceded the start of cosmic time; "Before the foundation of the world," that is, prior to "the beginning" of Genesis.

THE PURPOSE: A process for the heavenly Father to acquire children. He planned "us . . . as sons." This is the ultimate purpose of the Creation. Simply put; God wanted children. Of all things created, only God's children will survive the world's final judgment and destruction.

FORETHOUGHT: "Predestined" shows intent, design, and purpose before beginning an event or project.

GOD'S MOTIVATION: The expressions "in love" and "according to His kind intentions" reveal to us what motivated the Father to desire children. The same emotions motivate us, who are "made in His likeness," to desire children. "We have come to know and believe the love which God has for us. God is love" (1 John 4:7).

THE PROCESS: This plan is accomplished "by adoption," through the effort and teachings of Jesus Christ. This involves a conscience choice on our part. God gives us this freedom of choice: to love Him, or ourselves; to be His child, or Satan's. His adoption process requires our consent and our obedient love. "For this is the love of God, that we keep His commandments" (1 John 5:3). Simply put, God loves all souls He creates, but having given us a free spirit, He hopes we will return His love and become one of His children.

BEFORE TIME BEGINS, "HOW?" (GEN. 1:1)

"*In the beginning*," literally means "the head part," such as the locomotive of a train. Solar time, as we recognize it, had not yet started. This is also the event at which the apostle John begins his gospel. It is also

the point of reference that Jesus used to describe Satan's activities: "the devil . . . was a murderer from the beginning" (John 8:4).

"God," in Hebrew *Elohim*, is the plural form of "El," the word for "Deity." "Elohim" is used more than three thousand times in the Old Testament, and in the singular form, "El," only fifty-seven times. Note verse 26; "Let us make man in our image." The term "God" is applied to three separate Eternal Beings who have the same divine nature. The first is "God the Father" (Gal. 1:1) the world's designer. The second is Jesus, spoken of as "the Word [who] was in the beginning with God, and the Word was God" (John 1:1-2). "By the word of the Lord the heavens and the earth were made, and by the breath of His mouth all their hosts. . . . For it was spoken, and it was done" (Pss 33:6, 9). The third is the Holy Spirit, declared to be God by the apostle Peter, when he said Ananias "lied to the Holy Spirit . . . to God" (Acts 5:3-4).

"Created" is the third-person singular form of the Hebrew verb *bara*, which is a unique way of showing the unity and oneness of the plural subject Elohim, the Divine Ones. This word means "absolute creation," or "to bring into existence," and is used fifty-three times, and only with reference to God. In the Genesis account of creation, "bara" is used to tell of God bringing into existence: (1) the heavens and the earth; (2) all sea life; and (3) man in His image, or our souls (Gen. 1:1, 1:12, 1:27).

"The" is pronounced "eth" and is comprised of the first and last letters of the Hebrew alphabet, which has the significance of "the sum, whole, complete, and total."

"Heavens" comes from the root word for "aloft" and is only used in the plural form. Inspired writers spoke of three heavens (2 Cor. 12:2): (1) the earth's atmosphere containing birds and clouds (Gen. 1:20; Pss. 147:8); (2) the stars in the expanse of the heavens (Gen. 1:17); and (3) "The third heaven" of Paul's vision (2 Cor. 12:2), and also the place of God's throne in the apostle John's vision (Rev. 4:2).

"Earth" in this text, along with "the heavens," is emphasized as being completed by use of the word "the" (*eth*). These were created complete in the period called "the beginning," which was prior to the first celestial day, the start of our time and seasons. The implication is that all matter, energy, and natural laws were created at "the beginning."¹

1. See "All Matter and Energy Completed at Universe's Origin" in Chapter 5.

As there was a “beginning,” so will there be an ending in “Judgment” (2 Pet. 3:7, 10–13).

EARTH AT ITS CREATION (GEN. 1:2)

“*And*” is used as a conjunction to tie the event of the creation of the entire solar system to the status of the earth. The creation of the stars preceded the final preparation of the earth. God told Job that “as the foundations of the earth were being laid . . . the stars sang together” (Job 38:4–7). The same physical process that produces sound from the stars also produces light. Therefore, there were fully functioning stars before the earth’s present form was completed. The sound of the stars along with the shouting voices of angels accompanied the earth’s preparation for man’s habitation.

“*The earth*” now becomes the focus of preparation, for it is on the earth that God planned to produce children unto Himself.

“*Was*” carries the meaning “to exist, to be.” This is a statement of the condition of the earth at its origin.

“*Formless*,” meaning “to lay waste, empty, to no purpose” is from the Hebrew verb for “to roar, be in commotion.”

“*Void*” is from the Hebrew word for “emptiness.”

“*Darkness*” is “to be black, withholding light.”

“*Surface of the deep*” and “*surface of the waters*” completely covered the newly created earth under a blanket of absolute darkness. No sun or starlight penetrated this dark covering.

“*The Spirit of God*,” the first named of the three that have the nature of Deity, had His presence recorded at the Creation.

“*Was moving*” comes from the Hebrew word for “to hover.” The scene is the Holy Spirit hovering about in darkness over the waters, which cover the entire earth, as God the Word prepared to furnish this planet for man’s inhabitancy.

THE EARTH COMPLETED IN SIX DAYS

Celestial time began, as we know it. The Creator was kind enough to tell us something of the events of our world’s origin and their duration. I do not doubt that He could have done it in either a shorter or longer time. The evidence is overwhelming that the Bible writers considered these 24-hour days.

1. The Hebrew word for “day” is *yom*. It was used both to describe a solar day or any part of it and, figuratively, to indicate an extended period of time. *Yom* is used 357 times in conjunction with a number from “one” to “seven,” and this is always, without exception, referring to a literal 24-hour day of the week.
2. Each day is recorded to have an “evening” and a “morning.” A six-year-old can understand this argument.
3. The name of each day of the week is used in this Creation scenario. Until recent times, the numbers “one” through “seven” coupled with the word “day” were used in many languages as the names of the days of the week. This corresponds to the ancient and yet current practice of using numbers to name the days of the month. For example, the Biblical terms “day one” and “the first day of the week” are equivalent to our word “Sunday.”
4. Moses made it clear that only one week was involved when he summed up the events of Creation: “This is the account of the heavens and the earth when they were created, in the day that the Lord God made earth and heaven” (Gen. 2:4). “For in six days the Lord made the heavens and the earth, the sea and all that is in them, and rested on the seventh day” (Exod. 20:11).

Solar time, as we know it and are regulated by it, thus had its origin with the beginning. Nowhere does scripture state or imply that time or any events of Creation preceded Day One. The “beginning” is just what it implies, simply the start of the events that occurred during the six days in which the Lord created and made the heavens and the earth.

DAY ONE: LIGHT UPON THE EARTH (GEN. 1:3-5)

The Word (the Son of God), as the Creator, simply spoke and brought our universe into existence (Pss. 33:6-9, 148:1-5; Heb. 1:2-3). Following the Creation of the universe, the earth was exposed to light. He spoke and the light of our sun penetrated the darkness to illuminate the shimmering waters covering this globe as it slowly turned “and there was evening and there was morning, day one.” An interesting observation is that God gave names to some of the things He made, and He called them “good.” Those believing in Him agree, all nature displays the Creator’s power and intelligence in the most awesome terms.

DAY TWO: THE ATMOSPHERE MADE (GEN. 1:6-8)

“*Expanse*,” also translated “firmament,” is from the Hebrew word *raqia*, meaning literally “to spread out.” This word is used seventeen times, and never in the poetic sense. It is used to define two environments, each of which God named “heaven.” The Bible speaks of three heavens by including the place of God’s throne:

First, where the birds fly, “in the open expanse of heaven” (Gen. 1:20).

Second, where stars are placed, “in the expanse of heaven” (Gen. 1:15).

Third, God’s throne is in heaven, which is above the “expanse” (Ezek. 1:22-28), and referred to as “the third heaven” (2 Cor. 12:1-4).

The Biblical use of the word “expanse” relates to the first two “heavens.” Together they extend from earth’s surface to under the “heaven” of God’s throne. Therefore, the term “expanse” refers to both our atmosphere and celestial space. The “first heaven” blankets the earth and includes where the birds fly and water-bearing clouds form. On this day, God placed an “expanse” (first heaven) to divide the waters “below” (those that cover the earth) from the waters “above” (atmospheric moisture, including the water that forms clouds).

“*Above*,” is from the Hebrew word that quite often carries the meaning “in the midst of, beside, among, through and by.” Truly, we live “in the midst of” a sea of air containing the necessary moisture we breath and rain for the life of vegetation.

God provided the “expanse” to contain water in gaseous form in an atmospheric environment so that plants and animals could survive, separated from the waters of the seas. Simply said, this was the day God prepared the atmosphere required for life on the earth. This is when God “imparted weight to the wind, and meted out the waters by measure, when He set a limit for the rain, and a course for the thunderbolt, then He saw it and declared it: He established it and also searched it out” (Job 28:25, 26). Later, under Day Four, we will examine God’s preparation involving the “expanse” as it relates to the “second heaven.”

DAY THREE: LAND FORMED AND PLANTED (GEN. 1:9-13)

Land was made to appear and then was covered with vegetation.

“*One place*” describes the one basin that forms the ocean floor, which contain the waters “under the heavens.” God caused distribution of the seas and the appearance of continents that became dry land. He gave names to both: “seas” and “earth.” The 104th Psalm recounts the action of this catastrophic event of Creation. Mountains rose, valleys sank, and permanent boundaries for the seas were established (Pss. 104:5-9).

The current theory of plate tectonics, which proposes that the present continents were slowly divided billions of years ago from a single landmass by the movement of the ocean floor, contradicts the Bible’s claim that the ocean boundaries were made unchangeable. By faith, we understand that God caused unimaginably powerful forces that resulted in earth movement on Day Three; thus, the continents appeared above the surface of the water, and the seas as we now know them rested in “one bed.”² Was there a massive land movement on Day Three? Definitely!

“*Let the earth sprout.*” It was now possible for plant life to exist, since both dry land and a favorable atmosphere had been prepared. From the earth, God caused vegetation to “sprout,” which would have to occur from planting seed. Chapter 2 of Genesis offers interesting details pertaining to the beginning of vegetation in the Garden of Eden. “The Lord God planted a garden toward the east, in Eden; and out of the ground the Lord God caused to grow every tree that is pleasing to the sight and good for food” (Gen. 2:8, 9). Each plant was designed to reproduce after its own kind.³ This was the beginning of the Law of Biogenesis and the Law of Heredity—the two basic laws that govern all living things.⁴ We note that for a short period, before plant life and man’s cultivation, a mist preceded the event of rain to water the dry barren land (see Gen. 2:5, 6).

2. See “All Seas Lie in One Bed” in Chapter 2.

3. See “All Animals Reproduce after Their Own Kind” in Chapter 6.

4. See “Life Begets Life” in Chapter 6.

DAY FOUR: PURPOSE GIVEN TO STARS (GEN. 1:14-19)

On Day Four the celestial heaven (also described as the “second heaven”), which God created in the beginning, was given its purpose and function.

“*Lights*” refers to the stars, including our sun, since the definition of the Hebrew word is “a self-illuminating body.”⁵

“*Made*” is translated from the Hebrew word *asah*, which has a broad concept of “appointing to a purpose or cause to function.” This differs from the word “created” in that the subject of the action already exists. The stars were created on Day One but made to function according to God’s purpose for them on Day Four.

“*Let them be for.*” This command appointed them to their purpose and caused their functioning to produce signs and seasons, days and years. The world’s celestial time clock was now fully begun.

“*Greater . . . Lesser lights*” were made to provide light on the earth. The “greater” was for daylight, and the “lesser” we call “starlight.” The Hebrew text clearly states that the purpose of the “lesser light” was to govern the night, and that the “lesser light” was provided by the stars. Most translations show the words “He made” and “also” italicized because they were added to our English text. The literal Hebrew translation is “the lesser light to govern the night, the stars.” Note that the moon is not self-illuminating and therefore could not possibly be referred to as a “light.”

DAY FIVE: SEA LIFE AND BIRDS BEGIN (GEN. 1:20-23)

Sea life was “*created.*” Every creature from the greatest to the smallest living in the sea was spoken into existence. This is the second time the word “*create*” is used to explain the origin of something.

“*Formed.*” Every bird was “*formed*” out of the ground (Gen. 2:19). “*Formed*” is translated from the Hebrew word *yatsar* and comes from the root meaning “to form or fashion from existing materials.” Thus, God formed birds from elements “*out of the ground.*”

5. See “Sun and Stars Are Lights” in Chapter 1.

"In the open expanse of the heavens," the place where birds fly. In examining the Hebrew words, note the following definitions. *"In"* is translated from the Hebrew word meaning "over, above, on"; never does it carry the English meaning of "inside." *"Open"* actually comes from the Hebrew word for "face." The literal translation, as in Bible footnotes, reads *"on the face of."* Therefore, "birds fly on the face of the expanse of the heavens." This is the same language used in reference to the Spirit of God *"moving over the surface of the waters."* Simply, the birds were to fly on the lower surface (or face) of the expanse where it meets the earth.

"After its kind." God established both the origin and propagation of living animals on this day. Since then, all living animal life has followed the two basic laws of biology: biogenesis and heredity. We need not wonder, as some unbelievers do, which came first, the chicken or the egg. God instilled in animals the natural urge to procreate that they might *"multiply and fill the earth."* This implies that the earth, sky, and sea were not immediately full of animal life, but, as a result of the reproduction of subsequent generations, the goal of a full earth would eventually be accomplished.

DAY SIX: LAND ANIMALS AND MEN BEGAN (GEN. 1:24-31)

"Let the earth bring forth living creatures." As previously discussed, Genesis 2:19 tells us that these were formed from the ground and given the instincts necessary to multiply. Again, the implication is that it took a period of time for animals to populate the earth.

"Man" was the ultimate purpose of the Creation. Adam is described as both *"created"* and *"made"* by God. God placed him in a covenant relationship with Himself (Hos. 6:7, "But like Adam they have transgressed the covenant"). "Our first parents were placed under arrangements involving them in the essentials of a covenant."⁶

"Created." The spirits (souls) of both male and female were *"created in the image"* of God. God's divine nature is spirit, not flesh, and man, being a two-part being, has been given an eternal spirit patterned after

6. *The Pulpit Commentary*, Vol. 13, Erdmann's Publishing Co., 1962, p. 199.

the image of his Creator. Therefore, we have the ability to love, hate, reason, worship, etc. This is the third and last time, in the Creation account, that the word “create” is used. Actually, this form of creation continues with the creation of each newborn child’s soul. God “gives breath to the people on it [the earth], and spirit to those who walk in it” (Isa. 42:5b). The body made of “dust will return to the earth as it was, and the spirit will return to God who gave it” (Eccles. 12:7).

“*God formed man*” from the dust of the ground, using only the elements in the soil (Gen. 2:7), just as He had formed the bodies of birds and land animals.

God planted a garden toward the east, in Eden, and there He “placed the man whom He had formed.” God had Adam give names to the animals and birds. This implies that Adam was created with a language and with mature intelligence. The first thing declared “*not good*” was “*man being alone*.” From one of Adam’s ribs, God fashioned a woman, brought her to him, and bound them as man and wife. This was the beginning of God’s marriage law. Jesus declared, “That He who created them from the beginning ‘made them male and female,’ and said, ‘For this cause a man shall leave his father and mother, and shall cleave to his wife: and the two shall become one flesh’” (Matt. 19:4–6). Imagine being only hours old, married to someone you just met with neither of you having a history, and given instructions to live by. A busy day for Adam. Adam called his new wife “Woman” and named her “*Eve, because she was the mother of all the living*.” Adam knew that all human beings would emanate from his relationship with his wife, a fact Jesus confirmed.

“The Lord God took the man and put him into the garden to cultivate it and keep it.” God commanded them to

1. “Be fruitful and multiply.”
2. “Subdue the earth.”
3. “Rule over the fish, birds, animals and everything that moves.”
4. “Eat seeds from plants” and “fruit from trees.”
5. “From the tree of the knowledge of good and evil you shall not eat, for in the day you eat from it you shall surely die.”

DAY SEVEN: FINISHED, GOD RESTED, "WHEN?" (GEN. 2:1-3)

"Thus the heavens and the earth were completed, and all their hosts. And by the seventh day God completed His work which He had done; and He rested on the seventh day from all His work which He had done." The Creation was finished! God's plan for providing children unto Himself had begun.

How long ago was the Creation? Many Bible students have attempted to ascertain the genesis, or beginning, of mankind using the chronology found in the book named Genesis. Genesis begins with Adam and Eve at the Creation and ends about twenty-two hundred years later during the time of the twelve sons of Jacob, who became the founders of the twelve tribes of Israel.

Genesis contains "the book of the generations of Adam," 5:1-6:8, and covers history to the five hundredth year of Noah's life. In Genesis 5, the figures appear to indicate 1,659 years from Adam to the Flood. In Genesis 11, the figures indicate 427 years from the Flood to the call of Abraham. This total of 2,086 years, for the time period of Adam to Abraham, is where most of the related historical research has been done. Some have concluded for various reasons that a few hundred more years should be added, but not millions or even thousands.⁷

Abraham is considered to have lived about the time of 2000 B.C. Since in this study we are not concerned about exact dates, we can approximate the age of the earth by adding the following rounded-off years:

Adam to Abraham	2,000 years
Abraham to Jesus	2,000 years
Jesus to today	<u>2,000 years</u>
Creation to today approximately	6,000 years

LET US WORSHIP OUR CREATOR

The sea is His, for it was He who made it;
And His hands formed the dry land.
Come, let us worship and bow down;

7. *Halley's Bible Handbook*, Zondervan Publishing House, 1965, pp. 32-34, 85.

Let us kneel before the Lord our Maker.
For He is our God, and we are the people of His pasture, and the
sheep of His hand.
Today, if you would hear His voice,
Do not harden your hearts. (Pss. 95:5-8)

During the apostle John's vision of the throne in heaven, he heard praise for the One who sits on it, "Worthy art Thou, our Lord and our God, to receive glory and honor and power; for Thou didst create all things, and because of Thy will they existed and were created" (Rev. 4:11).

What could be more important to you than loving and worshiping your Creator, who desires to give you an inheritance as His eternal child? Jesus said, "If you love Me, you will keep My commandments" (John 14:15). He clearly commanded His apostles, "Go into all the world and preach the gospel to all creation. He who has believed and has been baptized shall be saved; but he who has disbelieved shall be condemned" (Mark 16:15, 16). The believer must act on his faith by changing his life where necessary so that his love of Jesus Christ is confirmed by his obedience to Him. Jesus taught that this change of heart and action was necessary to be saved from sins, that we might be adopted as one of God's children. Jesus warned, "I tell you . . . unless you repent, you will all likewise perish" (Luke 13:3, 5). Jesus taught, "He who rejects Me, and does not receive My sayings, has one who judges him; the word I spoke is what will judge him in the last day. For I did not speak on My own initiative, but the Father Himself who sent Me has given Me commandment, what to say, and what to speak" (John 12:48, 49).

WHAT IS YOUR RELATIONSHIP WITH YOUR CREATOR?

10

SCIENCE REVEALS THE AGE OF THE UNIVERSE



There is nothing more devastating to the doctrine of evolution than the scientific evidence of a young earth age. Without the millions and billions of years to justify the theoretical claim of the universe's slow evolutionary process, the theory becomes impossible and is defeated.

Those who oppose God's account of Creation do so to escape their full accountability to their Creator. These "did not receive the love of the truth so as to be saved. And for this reason God will send them a deluding influence so that they might believe what is false, in order that they all may be judged who did not believe the truth but took pleasure in wickedness" (1 Thes. 2:10-12).

By God's grace, man has the ability to research Creation. The twenty scientific observations described in this chapter point to a young earth and young solar system. They contain research into well-known processes and events of nature. When these are extrapolated backward in time, it becomes evident that every one of them has a very limited past age and that it is far less than those presented by evolutionists. These maximum time limits of the processes do *not* imply how long the time to their beginnings but do refute the claims that they began billions of years ago. God created the universe with all its natural laws and processes mature, fully functioning and with the appearance of age. Adam is a good example of apparent age. How old was he when he married? Was it not the first day of his life? Miracles of Creation did happen!

When all the information on the possible age of the universe is intelligently summed up, the conclusion results in an age limit of about

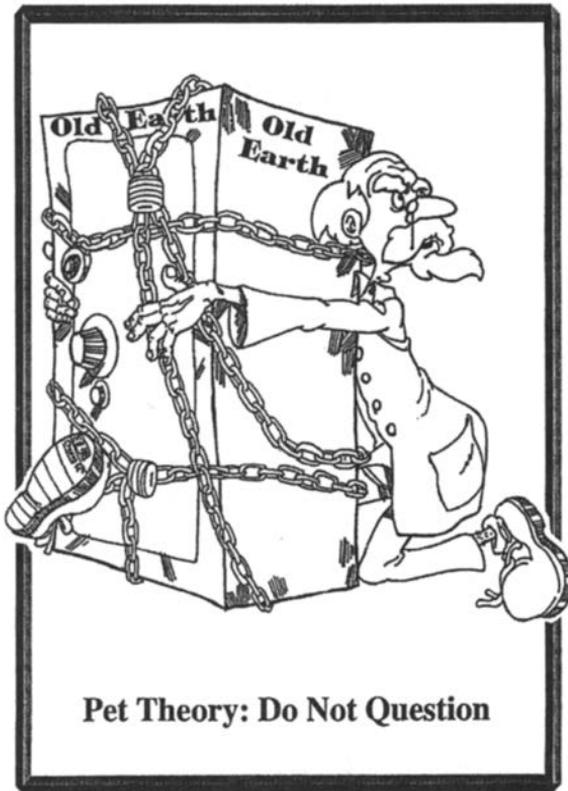


Figure 10.1

six thousand to a maximum of eight thousand years. This agrees with the Biblical age covered in Chapter 9.

“Those who have insight will shine brightly like the brightness of the expanse of heaven, and those who lead the many to righteousness, like the stars forever and ever” (Dan. 12:3).

THE SOLAR SYSTEM IS YOUNG

“When I consider Your heavens, the work of Your fingers, the moon and the stars, which You have ordained; what is man, that Thou dost take thought of him?” (Pss. 8:3). Not only do the heavens declare the awesome wisdom and power of God, but also a close examination of the solar system can provide indisputable evidence of its young age.

MOON RECESSION

FACT: The moon is receding from earth at a rate that cannot justify a period of time long enough to support an evolutionary process. Based upon a great amount of observable data and fundamental laws of physics, there are three proofs that the moon and the earth are too young for a presumed evolution to have taken place.

DISCUSSION: The first argument is an easily understood physical proof that the moon is too young for the presumed evolutionary age. The laws of physics show that the moon is receding from the earth at a known rate. To reverse the direction of this recession, using the same rate, the moon theoretically would physically contact the earth in about 1.4 billion years, far short of the 4.7 billion years evolutionists claim for its age.¹ We are not claiming the earth is 1.4 billion years old but that it *could not possibly be any older than that*.

The moon and the earth each have angular (rotational) momentum because they rotate. The moon has additional angular momentum (centrifugal force) because it revolves around the earth to balance the earth-moon system's gravitational pull. The earth rotation slows because of the moon's torque (pull) on the earth's tidal bulge that the moon creates, which then causes the earth to lose angular momentum. This angular momentum must go elsewhere in the system according to the Law of Conservation of Momentum. It cannot just disappear! The angular momentum transfers from the earth to the moon. This results in the moon increasing its orbital speed and therefore slowly increasing the distance at which it orbits the earth.

The second argument relates to the laws of physics that show the moon would have never survived a nearness to the earth of less than 11,500 miles. This distance is known as the Roche limit. The difference of the earth's gravitational forces on the closest and farthest parts of a large satellite, such as the moon, would break the satellite into pieces, something like the rings of Saturn. Thus, the receding moon was never that close to the earth.

The third argument describes the moon's tidal effects, which are inversely proportional to the distance cubed between the earth and the

1. Don B. DeYoung, "The Earth-Moon System," Proceedings of the International Conference on Creation, Vol. 2, 1990, pp. 79-83.

moon. The large disruptive tidal effects of a moon, initially in the vicinity of the earth, would be catastrophic for both objects. Earth tides would be several miles high. Frictional effects of the tides would raise the earth's temperature to one thousand degrees with consequent melting and partial vaporization of the crust. Dr. Louis B. Slichter, professor of Geophysics at M.I.T., concludes that "the time scale of the earth-moon system still presents a major problem."² How can the earth and the moon be the same age unless they both are of recent origin?

MOON ROCK FLOW

FACTS: The moon is scarred with thousands of impact craters. The craters have a high ridge that surrounds a bowl-like valley. At the surface of the moon, the downward stresses produced by the high ridge are larger than those at the valley. The larger pressure at the ridge acts to push up the material in the valley and will continue to do so until the bottom of the valley and the tip of the ridge are at the same elevation. The time for this to occur can be calculated if one knows the viscosity of the moon rock. Viscosity is a measure of the friction that exists between the molecules of a material. If there is low friction, the material flows easily, as in a liquid. If the friction is high, the material flows slowly, as in molasses, or much slower yet, as in a solid. Knowing the viscosity of the moon rock and the geometry of the craters, one may determine the time necessary for all of the impact craters on the moon to disappear. The calculations show the craters to be no more than a few thousand years old.

DISCUSSION: Rocks brought back from the moon by our Apollo astronauts have been carefully studied and found to be virtually identical with the type of earth rock known as basalt. Basalt rock has a viscosity rate lower than granite. A good analysis of the research done on moon rocks is contained in the *Creation Research Society Quarterly* (CRSQ) article, "The Age of Lunar Craters."³ The discovery that the moon's valley surface, including craters, is made up of basalt-type rock rules out the possibility that the lunar craters are more than a few thousand years old! A report by the U.S. Geological Survey affirms that if the laboratory measurements

2. "Geological Survey Research, 1966," U.S. Government Printing Office, Chap. A, p. A 132.

3. G. R. Morton, H. S. Slusher, and R. E. Mandock, "The Age of Lunar Craters," *Creation Research Society Quarterly*, Vol. 20, Sept. 1983, pp. 105-108.

on terrestrial basalt were applied to the moon rocks, "the ages of the large craters would have to be only 10,000 to 10,000,000 years."⁴

GALAXIES WIND UP TOO FAST

FACTS: The one hundred billion stars of our galaxy rotate about the galactic center. These observed speeds are so fast that if our galaxy were a few million years old, it would have progressed to the shape of a flat disc instead of its present form of a spiral.

DISCUSSION: "The stars of our own galaxy, the Milky Way, rotate about the galactic center with different speeds, the inner ones rotating faster than the outer ones. The observed rotation speeds are so fast that if our galaxy were more than a few hundred million years old, it would be a featureless disc of stars instead of its present spiral shape."⁵ Yet our galaxy is supposed to be at least ten billion years old. Evolutionists call this "the winding-up dilemma," which they have known about for sixty years. They have devised many theories to try to explain it, each one failing after a brief period of popularity. The same "winding-up" dilemma also applies to other galaxies.

For the last few decades the favored attempt to resolve the dilemma has been a complex theory called "density waves." The theory has conceptual problems, has to be arbitrarily and very finely tuned, and has been called into question by the Hubble space telescope's discovery of very detailed spiral structure in the central hub of the Whirlpool galaxy, M51.⁶

METEORITES

FACTS: A meteorite is a fallen meteor that is comprised of a large mass of metal and/or stone that has fallen upon the earth, the moon, or any other body in space. Meteorites provide two distinct kinds of evidences for a young earth. First, meteorites are not found buried in the rocks that are alleged to be old. And second, all meteorite craters found on the earth seem to be of recent origin.

4. "Geological Survey Research, 1966," U.S. Government Printing Office, p. A127.

5. H. Scheffler and H. Elsasser, *Physics of the Galaxy and Interstellar Matter*, Springer-Verlag, 1987, pp. 352-353, 401-413.

6. D. Zaritsky, *Nature*, July 22, 1993; *Telescope*, Dec. 1993.

DISCUSSION: First, meteorites should be found in the geological column, which the evolutionists claim has been building up over eons of time. Scientists doing research in the geological rock layers should frequently encounter meteorites with the same regularity with which they are found at the earth's surface. One survey of the literature failed to turn up a single case of a meteorite being found in the geological column.⁷ Fritz Heide disputes astronomers who write about meteorites and claim that there are fossil meteorites. He points out that "some fifty to fifty-five billion tons of coal have been mined, all of which have passed through the hands of people with a professional familiarity with stones, [and] it is certainly remarkable that ancient meteoritic material has never been found or described up to now."⁸ Second, identified meteorite craters are all of a relatively young age. Krinov listed fourteen craters that have been proven to be meteoritic in origin by the "discovery of iron meteorite fragments in the locale of these craters."⁹ All those examined for weathering, radiometric age (using Ar-39 and C14), or associated plant life and local traditional eyewitness accounts support an age of just a few thousand years.

METEORITE DUST

FACTS: Micrometeoroids are microscopic particles of dust that exist in abundance in the solar system in interplanetary space. The very existence of this dust, it has been shown, provides evidence that the system is young. This is because the dust is being removed much more quickly than it can be replenished. If the solar system were as old as evolutionist claim, the dust would have been gone billions of years ago.

DISCUSSION: There is much microscopic dust orbiting in the plane of the solar system. The problem is that solar radiation removes this material, smaller particles being ejected from the solar system and larger ones spiraling into the sun. The cleansing rate exceeds the dust production rate. If the solar system were 4.7 billion years old, then there is far too much interplanetary dust currently present. One of

7. P. Stevenson, "Meteoritic Evidence for a Young Earth," *Creation Research Society Quarterly*, June 1975, pp. 23-24.

8. Fritz Heide, *Meteorites*, University of Chicago Press, 1964, p. 8.

9. Stevenson, "Meteoritic Evidence," pp. 23-24.

the discoveries of the Jet Propulsion Laboratory's orbiting Infrared Astronomical Satellite was reported in a 1983 newspaper article:

What the telescope picked up that had never been seen before were three gigantic dust rings 100 miles wide circling the asteroid belt between Mars and Jupiter 200 million to 300 million miles from the sun. The dust bands, which had never before been seen because they are composed of particles too fine to see and too cool to shine, appear to defy the laws of physics by encircling the asteroid belt in three extremely stable and symmetrical rings. "Particles this small can only survive in stable orbits for a few ten-thousands of years before they are pulled apart by the sun," said Frank Low of the University of Arizona. "There must be something that replenishes the rings because three stable bands that large cannot exist any other way."¹⁰

The Poynting-Robertson Effect provides one well-known indicator of the solar system's youth. This effect of solar radiation has an important influence on the orbits of very small particles. First, there is a simple outward force from the sun due to solar radiation pressure. For small particles, this force may exceed the gravitational attraction of the sun and blow them out of the solar system. Second, the angular (circling) momentum of a particle is progressively destroyed by the fact that it receives solar radiation, which produces drag on the particle causing it to spiral into the sun. Robinson found that a particle of rock two-fifths of an inch in diameter started at the earth's distance would be "swept up" into the sun in ten million years. In two billion years any masses of rock less than six feet in diameter within the earth's orbit would be cast into the sun.

Yet significant quantities of meteoric dust are known to exist! There is a tremendous amount of particles grouped around the sun that reflect what is called zodiacal light. There is so much particulate matter still circulating, which could not be true if the solar system was of great age.¹¹

10. "Dust Rings Our Solar System: NASA Calls Space Scope Findings 'Spectacular,'" *Wichita Eagle and Beacon*, Nov. 10, 1983, p. 1A.

11. Harold S. Slusher, "Some Astronomical Evidences for a Youthful Solar System," *Creation Research Society Quarterly*, June 1971, pp. 55-57.

SHORT-TERM COMETS

FACTS: Comets provide one of the best arguments for a young universe. Since ancient times scientists have dated the comets from the beginning of the solar system. Comets are natural objects in space. They are very dirty icebergs made up of frozen dust particles, gases, and ice, and they have an elliptical orbit around the sun. Each time the comets pass close to the sun, they partially disintegrate due to the sun's powerful gravity, the solar wind, and internal explosions, leaving streaming trails of variable length. Halley's Comet is known to have lost thirty tons of material per second as it passed earth in 1910.

Comets are of two types: short-term and long-term. Short-term comets have been observed to diminish in size and even break up. Comets are fragile objects and cannot exist in the inner solar system for more than a few hundred revolutions around the sun. Therefore, the life of a comet is recognized as being limited by the number of orbits around the sun. Astronomers' estimates for the maximum life of a short-term comet vary from ten thousand to twenty-five thousand years. The existence of short-term comets is a valid argument for a recent Creation.

DISCUSSION: Short-term comets have long been recognized as a major problem for the long-age theory of the universe. The Dutch astronomer Jan Oort suggested the evolutionist current counter argument in 1950. He theorized that at the origin of the universe, a cloud of frozen comet nuclei, which he called an Oort cloud, formed as part of an asteroid belt between Mars and Jupiter. Occasional gravitational perturbations of other stars or molecular clouds would cause comet nuclei to change orbit so that they move the great distance toward the inner solar system and begin orbiting the sun as a short-term comet, thus replenishing the supply of dying short-term comets for 4.7 billion years. Oort assumed this comet cloud to exist, even though there is absolutely no evidence for it. To quote the famous astronomers Sagan and Druyan, "Many scientific papers are written each year about the Oort Cloud, its properties, its origin, its evolution. Yet there is not a shred of direct observational evidence for its existence."¹² And according to Paul Tteidle,

12. Carl Sagan and Ann Druyan, *Comets*, Random House, 1986, p. 201.

It is clear that evolutionary theories are totally incapable of accounting for comets in an old solar system. They cannot explain the formation, maintenance or return of comets. The chemical composition, behavior, and orbits of comets are not consistent with large ages and naturalistic formation. Comets are young objects. And since there is no natural mechanism which can account for a recent formation of comets, they must have been created recently in a recently created solar system.¹³

EARTH'S ROTATION IS SLOWING

FACTS: The earth's rotation is slowing down at a rate whereby it takes 118,000 years to lose one solar day per year. Therefore, as we project back in time, for each 118,000 years one solar day must be added as the earth completes its annual orbits. Extrapolating all the way back 39 million years ago, the earth's annual orbit would have had 3,650 days, each 144 minutes long, with the surface at the equator rotating about 10,000 mph. It is hardly conceivable that life could exist amidst the tumult of the water and air unable to keep up with a distorted shape of the fast-spinning earth. Long before 100 million years passed, the earth would have spun apart. How ridiculous it is to support an "evolutionary" origin of 4.7 billion years ago when the earth would have had to be spinning annually 34,000 times with 15-minute solar days, and with the equator whirling at 100,000 mph.

DISCUSSION: The earth's rotation is known to be slowing. The primary cause is the effect the moon's gravitational pull has on the earth's tides, acting like a break on the earth's rotation (see the earlier discussion of moon recession in this chapter). Losses in rotational energy are also due to many other reasons, the most common being the collision of high tides with continental borders, earthquakes, and periodic fluctuations in the earth's fluid core.

Since January 1, 1972, a new and different kind of time, called Coordinated Universal Time (UTC), has been kept in Paris. It is based on the average of atomic-clock readings from eighteen timing centers around the world, including the National Bureau of Standards in Boulder, Colorado; the U.S. National Observatory in Washington,

13. Paul M. Tteidle, "Comets and Creation," *Creation Research Society Quarterly*, Vol. 23, March 1987, pp. 153-159.

D.C.; and the International Bureau of Time in Paris. For the year 1999, a second is defined as $1/31,556,925.9747$ of the time it took to complete one annual orbit around the sun. Since earth's rotation (a solar day) relentlessly continues to slow (the days get a little longer), about once a year a full second has to be added to atomic time to square things.¹⁴

To understand how the history of the earth is affected by this slow-down, the year 1820 was chosen as the standard day by which to measure all years. It was in 1820 that the earth completed exactly 365 daily rotations during its annual orbit in 31,536,000 seconds (60 sec. \times 60 min. \times 24 hr. \times 365 days). The previous year (1819), the earth would have completed the same 365 rotations in one less second, or 31,535,999 seconds. And in the year 1818 the earth would have completed 365 rotations in 31,535,998 seconds, one less than 1819, and so on. As a result, each preceding year the earth would have shorter days by one second per year, gradually resulting in fewer seconds per day, which slowly added up to fewer minutes per day and eventually resulted in fewer hours per day. Therefore, the farther back we go in the earth's history, the faster the earth was spinning, making the days shorter and increasing the number of days needed for the earth to complete its annual orbits around the sun.¹⁵

When the above facts are applied to a time-line of earth's history, it is obvious that life could not have existed on this planet before a few million years ago, far short of the 4.7 billion claimed necessary for the supposed evolution of life to have occurred.

THE EARTH IS YOUNG

"For the earth is the Lord's, and all it contains" (1 Cor. 10:26). There are observations of natural events, which can be noted by the average individual, that demonstrate the young age of the earth on which we live. The following described natural processes are among those that leave no doubt in the recent origin of the earth.

RAPIDLY FORMED LAND FEATURES

FACT: Natural forces can make major alterations to the surface of the earth in days, giving the appearance of having taken ages. The

14. www.time.gov.

15. U.S. Naval Observatory, 7/2/2002, <http://maia.usno.navy.mil/leapsec.html>.

twentieth century produced many such major catastrophic events in our country, three of which completely astounded geologists with the rapid progression of change: the creation of Burlington Canyon over several days in 1927; the birth of the island Surtsey in 1963; and the eruption of Mount St. Helen's in 1980.

DISCUSSION: First, how long does it take a canyon to form? The eruption of Mount St. Helens in Washington State on May 18, 1980, is certain to be one of the most significant geological events of the last century. The total amount of energy released was equivalent to twenty thousand Hiroshima-size atomic bombs, involved one-half cubic mile of rock, and toppled 150 square miles of forest in six minutes. The immediate results were devastating to the theory that it took tens of millions of years to accomplish what has been recorded in less than five years after the eruption.¹⁶ Deposits more than five hundred feet thick were laid down in one day, and more eruptions added another one hundred feet. These deposits consist of many strata (layers), some only a fraction of an inch in thickness to as much as three feet thick. Previously it was assumed that it took millions of years to form so many layers.

A canyon one-fortieth the size of the Grand Canyon was created in a single day by the force of moving mud cutting through solid rock. A stream is now flowing at the bottom. A peat bed began forming at the bottom of Spirit Lake from the floating dense mat formed by millions of uprooted trees. Many trees are in an upright position and partly buried in the sediments, just as are found in coal mines. Bark and limbs from the logs have broken off and settled to the bottom and formed a layer of peat. We have learned that coal is forming within a short time.

Many organisms survived what initially appeared to be a lifeless blast zone. In the overlying ash, plants were observed sprouting. Also observed was activity by animals living underground, such as ants, gophers, etc.

Second, in March of 1926 an irrigation canal near Walla Walla, Washington, became choked up with tumbleweeds and was diverted

16. Steve Austin, *Mount Saint Helens: Explosive Evidence for Catastrophe*, Video, Institution for Creation Research, 1986.

into a 6-foot-wide and 6-foot-deep diversion ditch. The abnormally high flow crowded the ditch and cascaded down the mesa, causing extensive erosion to the underlying strata. In total, six days of runaway ditch erosion removed nearly 5 million cubic feet of silt, sand, and rock, thus forming the Burlington Canyon. It measures 1,500 feet long, and up to 120 feet deep and 120 feet wide, as it winds through the hillside. A small-scale analogy to Grand Canyon, it was observed to form in less than six days.¹⁷

Third, bursting out of the Atlantic Ocean a few miles south of Iceland in 1963, the new island of Surtsey represents yet another challenge to evolutionists. Within a matter of months, “surging surf ground jagged lava into rounded boulders with a speed that astonished geologists attending Surtsey’s birth.”¹⁸ The Icelandic geologist Sigurdur Thorarinsson observed:

On Surtsey only a few months have sufficed for a landscape to be created which is so varied and mature that it is *almost beyond belief*. Here we not only have a lava dome with a glowing lava lake in a summit crater and red-hot lava flows rushing down the slopes, increasing the height of the dome and transforming the configuration of the island from one day to another. Here we can also see wide sandy beaches and precipitous crags lashed by breakers of the sea. There are gravel banks and lagoons, impressive tephra (basaltic ash) cliffs, greyish-white from the brine and silicium that oozes out of the tephra, giving them a resemblance to the White Cliffs on the English Channel. There are hollows, glens and soft undulating land. There are fractures and fault scarps, channels and screes [landslides]. . . . You may come to a beach covered with flowing lava on its way to the sea. . . . *Three weeks later you may come back to the same place and be literally confounded by what meets your eye*. Now there are precipitous lava cliffs of considerable height, and below them you will see boulders worn by the surf, some of which are almost round, on an abrasion platform cut into the cliff, and further out there is a sandy beach where you can walk at low tide without getting wet.¹⁹

17. John D. Morris, Ph.D., “How Long Does It Take for a Canyon to Form?” *Impact*, 2001, p. d.

18. S. W. Matthews, “This Changing Earth,” *National Geographic Magazine*, Jan. 1973, p. 5.

19. Sigurdur Thorarinsson, *Surtsey: The New Island in the North Atlantic, Reykjavik, Iceland*, Almenna Bokafelagio, 1964, p. 52.

EROSION OF THE CONTINENTS

FACTS: The small amount of the earth's surface that has eroded can only account for a few thousand years. At the current rate of erosion, all continents would be eroded to sea level in fourteen million years.

DISCUSSION: The modern form of continental surfaces is thought to be 100 million years old by uniformitarians (evolutionists) and comprised of rock up to 3.5 billion years old. They claim that erosion supposedly has been cutting continental surfaces down for the last 70 million years. Once eroded, streams and rivers carry the sediments away and eventually enter the ocean. Most surveys show that these deposits accumulate along the continental shelves and river deltas, with only a small amount reaching the floor of the deep sea. The annual amount of sediment carried into the seas from the continents is 27.5 billion tons. However, much of the earth's surface bears little evidence of long-term erosion. The volume of the continents above sea level has been measured at 383 million billion tons. At the present erosion rates, all the continents would be reduced to sea level in 14 million years, points out Ariel Roth in "Some Questions about Geochronology."²⁰

Accompanying the erosion problem is the 410 million billion tons of sediment residing on the ocean bottom, averaging a depth of less than twelve hundred feet. At the fast rate of 27.5 million tons per year that sedimentary material is entering the ocean, we can determine that the ocean floor's age limit cannot exceed 15 million years. If the oceans were as old as commonly believed, *they ought to be full of sediments.*

These old-age suppositions by evolutionists create quite a dilemma for them. They want us to believe that continents averaging about two thousand feet high in their present form for the last 100,000 years, composed of rocks with ages up to 3.5 billion years old, are eroding at a rate that would flatten them to sea level in 14 million years and account for sediment deposits on the ocean floor of only 15 million years old. Does this make any sense, or have I missed something?

Not long ago it was thought that the ocean floor, in past ages, rose and sank several times and had periods of being dry land. This theory

20. Matthews, "This Changing Earth," p. 5.

was used to explain the small amount of sediments accumulated on the ocean floor, reasoning that the ocean had an extended period as dry land. This has all changed since 1960. The U.S. government began funding the Deep Sea Drilling Project in 1968. Thousands of ocean drillings have produced core samples to a depth of more than three thousand feet. Surprisingly, only sea life forms of plants and animals have been recovered, leading scientists to acknowledge that the present-day ocean basin has *never* been dry land.²¹

Sedimentation forms deltas at the mouths of the world's largest rivers. The U.S. Geological Survey approximates the age of large rivers by estimating the amount of sediment of the delta, formed at its point of exiting into the sea, and measuring the rate at which the river is discharging sediment. The large river deltas of the world show evidence of a young age. The mighty Mississippi River is a good example of such research. The true Mississippi delta begins at Baton Rouge. At the current rate of 2 million tons per day of deltaic deposits, it would take only 10 million years to fill the entire Gulf of Mexico. The average depth of the present delta has been estimated to be 40 feet, which gives an age of 4,900 years. General Humphreys and his staff of engineers and geologists from the U.S. Army Corps of Engineers studied the delta for 35 years. They found the average yearly advance of all mouths of the river into the Gulf of Mexico (262 feet per year) and then divided that rate per year into total number of miles up to the head of the delta (measured in 1876 to be 1,152,800 feet), which gave 4,400 years as the age of the delta. This is remarkably close to the 4,900 years determined by the river's flow rate.²²

GLACIER HISTORY

FACTS: The Arctic and Antarctica ice packs had their origin in a scientifically unexplainable amazing phenomenal event. Their landmasses once had luxuriant forests and a tropical climate. At some point in the earth's history, a cataclysmic event occurred that covered their tropical

21. M. N. A. Peterson, *Deep Sea Drilling Project: Reasons And Results*, Deep Sea Drilling Project, 1970.

22. Gen. A. A. Humphreys and Maj. H. L. Abbott, "Report of the Physics and Hydraulics of the Mississippi River," *Prof. Paper 13*, U.S. Army Corps of Engineers, 1876, pp. 92-95.

surface with two-thirds of the world's supply of fresh water (97 percent of the world's water is in the oceans, while 1 percent of fresh water is in lakes, rivers, and the atmosphere and 2 percent is frozen at the poles) to great depths; the fresh water was then quickly froze in a matter of hours or days. Tropical vegetation and vast amounts of animal life were quick-frozen and remain so to this day. Mammoths along with mastodons have become mummified in two manners, both of which suggest cataclysm and suddenness. In Alaska and Siberia, apparently millions of mammoths have been mummified both in ice and in sedimentary strata.

Ice and snow can deeply bury anything left on a glacier's surface in a very short time. One outstanding example is the squadron of six new P-38 Lightning fighter planes and two B-17 Flying Fortresses that lost their way during a blinding snowstorm on July 15, 1942, and made emergency landings on Greenland's ice sheet. In 1986, a search expedition pinpointed all eight aircraft. During forty-five years, the glacier, about 5,000 feet thick, had borne them downstream and snow had buried them 260 feet under the surface. The first P-38 recovered was found to be in repairable condition²³ and was reconditioned and flown in 2001. You do the math. If the glaciers increase their height at the rate of 5 percent every forty-five years, their origin dates to about nine hundred years ago.

Two map fragments dated 1513 and 1518 that were compiled from a number of now lost ancient originals, which existed long before the time of the Greeks, are on display in the National Museum of Turkey. At the bottom of one of these fragments, the coastline of the Antarctic continent is shown along with rivers and mountains. The original map, which shows amazing knowledge and accuracy, was made when the Antarctica was ice-free.²⁴ The Antarctica mountains and portions of the coastline, beneath five thousand feet of ice, depicted on the map have been confirmed by scientific studies since 1952.

Many ice core samples have been drilled, some to a depth of fifteen thousand feet. Their analysis in many studies proves to be difficult, if not

23. "The Lost Squadron," *Reader's Digest*, July 1994, pp. 113-118.

24. Charles Hapgood, *Maps of the Ancient Sea Kings*, Chilton, 1966, as quoted in E. A. von Fange, "Time Upside Down," *Creation Research Society Quarterly*, Vol. 11, June 1974, pp. 14-27.



Figure 10.2 Antarctica Map in National Museum of Turkey

impossible, because the deeper the core sample, the more questionable the ability to date it. Although core samples can reveal recent climatic history, many assumptions must be used on the lower core samples.

The following four historical events demonstrate the young age of the ice caps at the Poles:

1. A near miraculous burial of a lush tropical climate under thousands of feet of almost instant ice.
2. The rapid snow and ice buildup depth of the glacial surfaces.
3. Ancient maps that detail portions of Antarctica.
4. The interpretation of ice core samples possesses problems and can be speculative.

DISCUSSION: In his book *Maps of the Ancient Sea Kings*, Charles H. Hapgood revealed that the 1513 Piri Re's map exhibited a knowledge of the true ice-free portions of Antarctica (see Fig. 10.2). The longitudes for twenty-four sites are accurate within one-half of a degree of the true positions. This accuracy could not be matched until 1735, when John Harrison invented the marine chronometer. The ice cap in those portions of Antarctica is presently about a mile thick. A maritime culture existed before Antarctica was covered by ice. The Bauche map (1754) shows the Antarctic continent without ice and divided into two great islands, a fact

not reestablished until 1958. Ancient maritime civilizations sailed the Antarctica Ocean at the time it was ice-free, though geologists claim that the ice has been there many tens of thousands of years! Mapmakers were at work at the dawn of prehistory. These facts provide information demonstrating that the earth's glacial period is relatively young. It seems that evolutionists are not accounting for all the facts when they claim that the oldest ice sheets in Greenland are 160,000 years old, and some claim that the ice sheets in Antarctica are 15 million years old.²⁵

Ice cores drilled from the polar regions contain records of climate changes from the distant past. Research teams from the United States, Russia, Denmark, and France have bored holes more than one mile deep into the ice near the poles and removed samples for analysis. The Greenland ice sheet averages almost four thousand feet thick. Snow compacts into ice as the snow above weights it down. This causes thinning of ice layers as the tremendous weight above forces the ice at lower levels to squeeze out horizontally. The average annual thickness of ice accumulated at Camp Century, located near the northern tip of Greenland, is believed to vary from about fourteen inches near the surface to less than two inches near the bottom. If, for simplicity, we assume the average annual thickness to be the mean between the annual thickness at the top and at the bottom (about eight inches), this still gives an age of less than six thousand years for the four thousand-foot-thick ice sheet to form under uniformitarian conditions at that location.

It is also possible with a high degree of accuracy to cross-check the counting of annual layers with occasional peaks in acidity and particulates from the fallout of historic volcanic events and correlate the peaks in the mean acidity of annual layers from A.D. 553 to A.D. 1972 with historic volcanic events. About a dozen historical volcanic eruptions from Crete are evident in the ice core in central Greenland. The confidence in the chronology becomes less the lower in the ice sheet one goes.²⁶

The ice caps at the North and South Poles, also known as the Arctic and Antarctic, have an actual history going back to a time of a tropical

25. www.geocities.com/Athens/Troy/6396/lightfal051.htm.

26. C. U. Hammer et al., "Dating of Greenland Ice Cores by Flow Models, Isotopes, Volcanic Debris, and Continental Dust," *Journal of Glaciology*, Vol. 20, 1978, p. 3.

climate and mapmaking sailors. Although Christians do not claim to understand everything about God's process in creating these ice caps, we certainly recognize the fact that they are of recent origin and are not in agreement with evolutionists' claims of ages in the hundreds of thousands of years.

ACCUMULATION OF SEA SALTS

FACTS: Recent geochemical studies of the oceans show that there is much evidence for a young earth. We know the amount of chemicals in the oceans and the rate they are being added. Assuming, as evolutionists do, that the oceans contained no initial chemicals and that the rate of supply has always been the same as the present time, one could estimate a maximum age for the ocean and therefore the earth. Thus, using extreme minimum and maximum values, a maximum age could be only sixty-two million years, not the three billion years evolutionists claim and need for life to evolve. Whatever levels of sea salts were present at Creation would have to be close to today's levels for sea life to have existed then. Either too little or too much salt, as in the Dead Sea, and there would be no sea life. The conclusion is that using the most generous parameters, there would not be enough time for an evolutionary process to occur, and given the necessary balance between sea salts and sea life today, the present oceans have a relatively short history.

DISCUSSION: Sodium (in the form of salt, or NaCl) is the most prevalent chemical in seawater. For decades investigators have attempted to monitor sodium input and output and have identified numerous mechanisms.

The input processes are well known and accepted:

1. Rivers: from weathering, easily dissolved deposits, and ocean waves spray.
2. Ocean-floor sediments: release sodium back into the ocean.
3. Pulverized sediments in glacial ice: particles added by glacial melting.
4. Atmospheric and volcanic dust and steam: windblown.
5. Coastal erosion.
6. Ground-water seepage: contains dissolved solids.
7. Sea-floor hydrothermal vents: hot springs on the ocean floor.

The output processes are:

1. Sea spray.
2. Ion exchange: removes sodium from seawater.
3. Burial of chemicals: trapped in accumulating sediments.
4. River-water evaporation: trapped in pools or lagoons, creating deposits.
5. Iteration of sea-floor basalt: produces clays, which can absorb sodium.
6. Zeolite formation: zeolite in volcanic ash absorbs sodium.

Simply using modern instruments to measure the ocean's present salt content, with its rates of input and output, the imbalance is so great that all of the sodium in the oceans would only take thirty-two million years to accumulate.²⁷ The data shows that there is an enormous imbalance of sodium inputs to outputs—a ratio of 0.27 out to 1.00 in. Sodium is being added faster than it is being removed, thus there is not a steady-state condition. The oceans could hold twenty times the current amount of sodium. This implies a young process that is far from attaining a steady state. The ocean floor sediment is a relative small quantity, and this indicates a short time of accumulation.

Sea salt studies show that the oceans cannot be in excess of sixty-two million years old, one-fiftieth of the age claimed by evolutionists, while sodium level studies indicate a maximum of thirty-two million years. The evolutionists steady-state model (sodium in = sodium out) is absolutely inconsistent with the data itself, which portrays a young and unfinished process. Sea life would only recently have had the necessary level of salts to facilitate their survival, given the known rate that salts accumulate in the oceans. Chemicals in the limited sedimentation of the ocean floor are insufficient to account for an old age.

RECENT ORIGIN OF OIL, GAS, AND COAL

FACT: It has been demonstrated that cellulosic (plant-derived) material, such as garbage or manure, can be converted into a good grade of petroleum in twenty minutes. Wood or other cellulosic material has

27. Steven A. Austin, Ph.D., and D. Russell Humphreys, Ph.D., "The Sea's Missing Salt: A Dilemma for Evolutionists," *Proceedings of the Second International Conference on Creationism*, Vol. 2, 1990, pp. 17–32.

been converted into coal in a matter of hours. The incredible pressure found in gas and oil wells indicates that these reservoirs are of a relatively young age, even though the rock formation they are found in is claimed by evolutionists to be several billions years old. Also, human fossil evidence has been found in many coal beds, indicating their recent origin. The fast creation of coal beds is witnessed by fossilized polystrate (many strata) trees, which are embedded through many seams of coal. Radiocarbon testing has shown both coal and petroleum reserves to be less than five thousand years old.

DISCUSSION:

Petroleum in Minutes and Coal in Hours

Scientists from the U.S. Bureau of Mines have been able to convert cellulose material into coal material in a few hours and into oil in twenty minutes. The two processes are nearly identical. Slightly different temperatures and pressures are needed. If water is present, the product is oil. If the water is permitted to escape, coal is produced. Cellulose material, primarily wheat grain, is being converted into gasoline (methanol) by this process in several countries. Millions of years are simply not needed for production of gas, oil, and coal. Today, ethanol, a gasoline supplement, is produced from corn in hours.

Natural Gas Pressure Still High

Methane, the primary component of natural gas, escapes slowly through the rock above it. One method of finding an oil field is the testing, for methane absorption, of plants growing above it. This is possible due to slow continual gas leakage from the reservoirs. Therefore, the dynamic activity that produced these gas reservoirs could not have occurred longer than three million years ago or the leakage would have released the reservoir's pressure. Finally, evidence for young oil occurrence is substantiated by the lack of finding any ancient oil reservoirs without pressure.

Polystrate Fossilized Trees

Polystrate fossilized trees are found embedded vertically in numerous coal deposits, which are composed of many coal seams alternating with beds of sandstone, siltstone, and shale. In many instances, these

trees appear to have been moved to the coal deposit locations, since they are found inclined or upside down, and all have been truncated with no complete root systems, while some are hollow with different sediments inside than the surrounding matrix. These fossilized trees pass through many strata, indicating a catastrophic event that accumulated massive floating mats of cellulosic debris for conversion to coal during a period of rapid sedimentation. Such a scenario has been observed after the Mount Saint Helens eruption in 1980, which produced a floating log mat, comprised of millions of rootless and branchless blown-down trees, that floated and sank to the bottom of Spirit Lake.²⁸ In the few years since the eruption, nature has produced a succession of individual layers typical of coal deposits at the bottom of Spirit Lake. These layers now have polystrate tree trunks embedded in them. This recent natural event demonstrates the necessity for rapid sedimentation and a short period of time for production of coal.

Human Artifacts Found in Coal

Human fossil evidence found in coal formations, three hundred million years old according to conventional dating, offers proof that the origin of coal actually coincides with modern human civilization. Some of the best-known finds in coal beds are:

1. In 1958, Dr. Johannes Huerzeler of the Museum of Natural History in Basel, Switzerland, found a child's human jawbone at a depth of six hundred feet in a coal mine in Tuscany, Italy. The coal seam it was removed from had been dated at twenty million years.
2. At the Heimathaus Museum in Vocklabruck, Austria, is a highly scientifically examined cast iron block found in 1885 in coal while workmen were breaking coal blocks for a foundry's furnace. One wonders how evolutionists can dismiss this obviously man-made artifact, which was found in coal that was supposedly sixty million years old.
3. As reported in the *Morrisonville Times*, of Morrisonville, Illinois, on June 9, 1891, Mrs. S. W. Culp was shoveling coal into her stove when a large lump broke open, revealing a ten-inch long, 18-carat

²⁸ Steven A. Austin, *Mount St. Helens: Monument to the Flood*, Video, Institution for Creation Research, 1995.

gold chain. The reporters investigated and found the chain still clinging to the lump of coal, which still bore the imprint of the chain. This particular type of coal is claimed to be three hundred million years old.

4. In supposedly the same age strata was an iron pot found by two employees of the Municipal Electric Plant of Thomas, Oklahoma, in 1912. One chunk of coal was too large to fit in the plant's furnaces, so one workman took a sledgehammer to it. The iron pot, as well as the coal forms that fit around the outside and inside of the pot, were freed.²⁹
5. In the Number Three Coal Mine at Bear Creek, Montana, miners found two huge human molars in strata dated at least thirty million years ago. The discovery was made in 1928. Man was not supposed to have existed at this time.³⁰

Young Radiocarbon Dates

Radiocarbon dating has readily refuted the proposed carboniferous coal age of 250 million years. Coal has been carbon-dated at 1,680 years by the Vernadski Institute of Geochemistry. In Spain, specimens of coal have been carbon-dated at 5,025, 3,930, and 4,250 years.³¹ These are just a few carbon-dating results that validate young coal reserves, and therefore a young earth. Carbon-dated petroleum reserves have also provided similar young ages.³²

In the search for petroleum and coal reserves, governments and industry cannot waste time or money on doubtful theories and exploration. This is why most of the above information comes from research that has proved successful in the discovery of hydrocarbon reserves, which can produce fuels that power civilization. The uniformitarians' old earth age theories just did not produce the best exploration results.

29. J. R. Jochmans, "Strange Relics from the Depths of the Earth," *Forgotten Ages Research Society*, Lincoln, Neb., 1979, as reported in "The Origin of Coal and Oil," *Bible Science Association*, July 1982.

30. *Stranger Than Science*, Bantam, 1967, p. 77, as quoted in "Time Upside Down," *Creation Research Society Quarterly*, Vol. 11, pp. 14-27.

31. G. Delibrias, M. T. Guillier, and J. Labeyrie, "Gif-Sur-Yvette Natural Radiocarbon Measurements II," *Radiocarbon* Vol. 8, 1966, p. 74.

32. Milton A. Trautman and Eric Willis, "Radiocarbon Measurements V—Natural Gas," *Radiocarbon* Vol. 6, 1966, p. 161.

RAPID GROWTH OF DRIPSTONES

FACT: When one visits a commercial cave, the guide often presents a highly exaggerated age based on the size and supposed growth of various cave dripstones: stalactites, stalagmites, and flowstones. Current records and research show that there are many variables that can cause a wide range of growth rates, from many inches per year to imperceptible growth. For this reason, the proclaimed age of many major caves are continually being greatly reduced.

DISCUSSION: Many times actual rapid growth rates of stalactites and stalagmites have been observed in limestone caverns—as high as one inch per 7.5 days.³³ Artifacts, animal remains, and even human remains have been found fused in dripstones that geological uniformitarians have declared to be millions of years old. Stalactites in recently built tunnels, bridges, bunkers, vacated British air-raid shelters, etc., often provide proof of how rapidly dripstones can form.

One of the most interesting observations can be made during the National Park Service guided tours through the eerie cavelike foundation under the Lincoln Memorial in Washington where the Potomac River once flowed. A curtain of stalactites grows from the foundation ceiling beneath the memorial. Some of the stalactites are five feet in length and join stalactites to form columns. The Lincoln Memorial was built in 1923, and fifty-three years later public tours began. The construction employees left behind artifacts that can be seen encased in dripstone formations: old ladders, discarded broken tools, more than a few long-empty whiskey bottles, and the usual construction debris. It obviously did not take long for these dripstones form.

A remarkable illustration of the folly associated with uniformitarian geologists, who proclaim that the slow buildup of dripstones determines caverns' ages to be millions of years, is exhibited in a 1993 article published in *Arizona Highways* magazine. Jerry Trout, a geologist and employee of the U.S. Forest Service who spent a significant portion of his life studying cave formations, states: "From 1924 to 1988,

33. E. L. Williams, K. W. House, and R. J. Herdtklotz, "Solution and Deposition of Calcium Carbonate in a Laboratory Situation IV," *Creation Research Society Quarterly*, Vol. 17, March 1981, pp. 205–206.

there was a visitor's sign above the entrance to Carlsbad Caverns that said Carlsbad was at least *260 million years old*. In 1988, the sign was changed to read *7 to 10 million years old*. Then, for a little while, the sign read that it was *2 million years old*. Now the sign is *gone*." Mr. Trout also reported that the maximum rate of stalactite growth he had observed was seven inches in ten days.³⁴ The existence of dripstones in caves is no proof of great age; present dripstones can fit in well enough with a young earth.

MODERN POLLEN FOSSILIZED

FACT: Modern pollen grains or spores have been found in Precambrian Hakatai shale formation in the bottom rocks of the geological column in the Grand Canyon, which according to evolutionary geology is six hundred million years old. This pollen evidence proves that many types of today's plants and trees did not evolve but have remained unchanged since the beginning of fossil history. Rocks might be dumb, but they do tell a *true* story. Scientists might be smart, but their prejudices can lead them to tell a *twisted* story.

DISCUSSION: Pollen grains, which are called spores, are divided into two classes—male and female—and are necessary for vegetation reproduction. They can become excellent and well-preserved microfossils because of their hard external coat, thus providing us with a record of what types of plants were growing when the grains became embedded in the rocks.

In 1964, Dr. Clifford Burdick conducted a sampling of pollen from various strata, supposedly three hundred million to six hundred million years old, at the bottom of the Grand Canyon. His research provided pollen from thirty-three modern plant and tree species, along with pollen of extinct species. Types of pollen discovered included that of plants now growing at the top canyon, such as evergreens, conifers, oak trees, flowering-type trees, and many flowering plants. His finding proved unbelievable to the scientists at the two labora-

34. "Studies of Precambrian Pollen: Part I," *Creation Research Society Quarterly*, Vol. 23, Dec. 1986, pp. 99–104; "Studies of Precambrian Pollen: Part II," *Creation Research Society Quarterly*, Vol. 23, Mar. 1987, pp. 151–153; "Studies of Precambrian Pollen: Part III," *Creation Research Society Quarterly*, Vol. 24, Mar. 1988, pp. 173–182.

tories—the University of Arizona and Loma Linda University—who examined his samples. Since their evolutionary training led them to believe that modern plants did not exist at the time the Hakatai shale strata was being formed, they assumed that Dr. Burdick's research team had allowed the samples to be contaminated with atmospheric pollen grains. The field expedition and lab tests were repeated in 1970 under stricter procedures, with university staff present, to prevent any contamination. The results were the same. Again, in 1984, the Creation Research Society (CRS) and the chemistry department at Bob Jones University repeated Dr. Burdick's research with the same results.³⁵

Consider the pollen evidence found in the Hakatai formation. All fossil pollen had taken on a red color, the same as the color of the Hakatai shale. The rock specimens produced a fossil mix of both modern and extinct plant pollen. You be the judge. Who is most reliable to reveal the truth—dumb rocks or prejudice scientists?

SHORTAGE OF ATMOSPHERIC HELIUM

FACTS: The low amount of helium in the atmosphere can be used as an argument for a young earth. There are four sources of atmospheric helium production: (1) as a byproduct in the decay process of radioactive materials, (2) primordial (original and not from radioactive decay), (3) helium coming through the crust from the mantle, and (4) cosmic ray collision with nitrogen and directly from solar winds. Sensors have measured the rate of helium released into the atmosphere to be 13 million atoms per square inch every second. This phenomenal rate compares to the theoretical rate of helium escape into outer space of a maximum of about 0.3 million atoms per square inch every second. Therefore, helium is accumulating in the atmosphere at the very fast rate of forty times as fast as it is leaving.

The quantity of helium in the atmosphere is known. Scientists using both the amount of helium being produced and the amount that is escaping, although not taking into account any primordial (original) helium, calculate the time needed to reach today's level of atmospheric

35. Larry Vardiman, "The Age of the Earth's Atmosphere Estimated by Its Helium Content," *Proceedings of the First International Conference on Creationism*, Pittsburgh, Penn., 1986, pp. 187–195.

helium to be about 370,000 years. Significant amounts of primordial helium are known to be in mantle rocks and therefore most likely to also have existed in the atmosphere at its formation. This unknown amount of primordial atmospheric helium could reduce the age of the earth's atmosphere significantly. The result is that the quantity of helium in today's atmosphere cannot come close to supporting an age of 4.7 billion years.³⁶

DISCUSSION: Helium is lightweight, inert, and mobile and rises in any fluid medium. Deep rocks presently contain much helium, both primordial and from radioactive decay. Different types of rocks have different permeability, but no rock provides a helium seal. Helium moves through rock faster than any element, other than hydrogen. Since helium rushes to the surface, there would be no primordial helium left in the rocks, and with 4.7 billion years of helium production, our atmosphere would have about two thousand times the current amount! As it is, our atmosphere contains only 1.4 parts of helium per million parts of other elements. And most is still in the rocks!

A study published in the *Journal of Geophysical Research* shows that helium produced by radioactive decay in deep hot rock has not had time to escape. Though the rocks are supposed to be more than one billion years old, their large helium retention suggests an age of only thousands of years.³⁷

The main process that evolutionists have considered to explain the excessive loss of helium is its thermal escape in the past. They assume that the missing excess helium was generated in the past and somehow attained superheated temperatures of 3,200°F to 4,100°F at the outermost portion of the atmosphere. This increase in temperature supposedly energized the helium to obtain escape velocity. This is the process whereby light gas molecules or atoms can escape from the gravitational attraction of the planet if they exceed the escape velocity. The problem with this theory is that the known influx of helium from space is estimated to be three thousand times that escaping into

36. R. V. Gentry, G. J. Glish, and E. H. McBay, "Differential Helium Retention in Zircons: Implications for Nuclear Waste Management," *Geophysical Research Letters*, Vol. 9, No. 10, Oct. 1982, pp. 1129–1130.

37. J. C. G. Walker, *Evolution of the Atmosphere*, Macmillan, 1977, pp. 318f.

space. Several other theories have also been proposed, although none has adequate observations to support them. J. W. Chamberlain, atmospheric scientist and author, states that the helium escape problem “will not go away.”³⁸

EARTH'S MAGNETIC FIELD

FACTS: The depletion of the earth's electromagnetic field strength is documented in scientific literature as an irreversible worldwide decay. Like a clock spring, it is running out of energy. This relatively rapid phenomenon is unparalleled by any other worldwide geophysical phenomenon.

Scientific studies of the earth's magnetic field have provided two significant arguments against the theory of evolution:

1. By extrapolating the earth's electrical energy decay and its associated heat loss backward in time, the resulting data suggests that less than ten thousand years ago the earth would have been much too hot for life to exist.
2. The magnetic field is necessary, since it shields the earth from the sun's broiling clouds of electrified gas and deadly cosmic rays just a few hundred miles over our heads. The depletion of this shield has two side effects: (1) future harmful biological effects, and (2) lowering of carbon 14 (C14) dates.

Therefore, the concept of a young earth is validated by the short life of its magnetic field and, consequently, requires revision in testing assumptions for older C14 dates.

DISCUSSION: An electrical current flowing in a circular path can produce a magnet and is called an electromagnet. The earth's magnet is an electromagnet, being produced by an electrical current circulating in the molten core of the earth. From the earth's beginning these freely circulating electrical currents have produced the magnetic field. They are freely decaying currents, and consequently the magnetic field is also freely decaying. The current in the molten core is still “coasting,” but it cannot continue indefinitely because electrical energy always

38. J. W. Chamberlain, *Theory of Planetary Atmospheres*, Academic Press, 1978, pp. 330f.

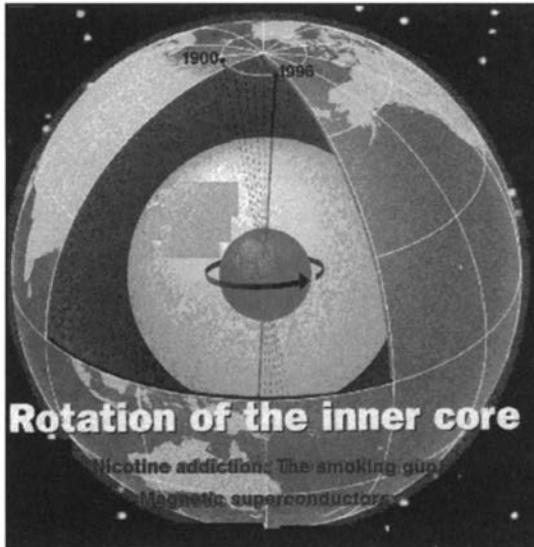


Figure 10.3 Core Rotation Generates Electrical Energy

encounters resistance. The continuing energy loss of the electrical currents, due to this resistance, is converted to heat energy. Therefore, as the electrical currents decay, the amount of resistance reduces proportionally, producing less heat energy in the earth's core.

Also, as the total amount of circulating electrical energy reduces, the earth's magnetic field weakens and shrinks. The electrical current in the earth's core is six billion amperes. The present rate of loss of energy in the core is eight hundred megawatts, roughly equal to the electrical power requirement for a city of one million people. This demagnetized doom was the plot of a 2001 sci-fi flick, *The Core*, where the earth's center had stopped rotating, causing the planet's protective magnetic field to disappear. Karl Gauss invented a magneton meter to measure the absolute value of the magnetic field. His value of the total strength of earth's magnet (called magnetic moment) was first recorded in 1835. There is now ample data to show that the total strength of the earth's magnet has been decaying at a relatively rapid rate. For more than 165 years, the earth's magnetic field has been measured and used to determine the value of the current in the earth's core. The present value is a little more than six billion amperes. Any time

electrical current flows in a conductor, some heat is produced by resistance to the current. A sizeable amount of heat is being generated in the core of the earth, and this represents a continuing drain on the energy stored in the earth's magnetic field.

Effects of a Strong Magnetic Field in the Past on Determining the Age of the Earth

This type of decay is more easily understood in terms of its half-life, the time required for the value to decrease by a factor of one-half. The Magsat satellite launched by NASA in 1979 found the core electrical current half-life to be 830 years for the earth's main magnetic field.³⁹ This loss of rotating electrical energy causes the earth's magnetic moment to be a half-life in 1,400 years. This means that every 1,400 years, the earth's magnet loses half of the strength that it had at the beginning of that period. Note that after each interval of 1,400 years, the remaining fraction is reduced by one-half. Five half-life intervals represent 5 times 1,400 years, or a total lapse of 7,000 years. Hence, in 7,000 years the earth's magnetic field decays to $1/32$ of its initial value. By extrapolating from the data of the last 165+ years, both past and future energy levels of the earth's magnetic field can be estimated. The earth's magnetic clock started with so much energy that it is still running from its initial "winding."

These stronger magnetic fields of the past can be employed to set a physical limit on the age of the earth's magnetic field. Ten thousand years ago, the magnetic field would have been 150 times as strong as it is today. That value is as strong as the magnetic field of some magnetic stars. At 20,000 B.C., the magnetic field would be 60,000 times stronger than today and the associated electrical current would have already generate more than enough heat energy for a total meltdown.

Effects of a Strong Magnetic Field in the Past on Radiocarbon Dating

One of the consequences of the stronger magnetic field in the past was better shielding of the earth and its atmosphere from primary cosmic rays, thus reducing the rate of production of radioactive C_{14} in the atmosphere. Primary cosmic rays interact with the atmosphere

39. "Magsat Down, Magnetic Field Declining," *Science News*, Vol. 117, No. 26, 1980, p. 407.

to produce neutrons, which in turn transmute nitrogen atoms into C₁₄. With a lesser number of cosmic rays striking the atmosphere per second, a smaller rate of production of C₁₄ existed in the past. A smaller production rate than has previously been assumed would have noticeably reduced the age of C₁₄ dates. The steady-state rate of decay assumption used for C₁₄ dating could give erroneously high dates. Thus, the older the date, the larger the error and higher the age exaggerated.

*Effects of a Weak Magnetic Field in the Future
on the End of Life on the Earth*

As the giant magnet within the earth's core gets weaker, the magnetic field it produces also gets weaker. This magnetic field provides a magnetic shield around the earth that extends into space. Note that at the pole regions some rays enter along the lines of magnetic force and experience no deflection. This accounts for the awesome and beautiful colored aurora displays. Most of the solar wind and some cosmic rays, which are harmful forms of electrically charged particles, are deflected from the earth by its magnetic shield. Satellite measurements indicate that this magnetic field exerts pressure on the solar wind. This pressure produces a "bow wave" thousands of miles distant from the earth. Solar winds flow around this bow wave, missing earth and protecting it from dangerous radiation.

The outlook for the future is of concern today, because the magnetic field has been weakening by 5 percent a century for the past several hundred years. In a government publication, Dr. Keith McDonald, a consultant to ESSA's Earth Science Laboratories, has pointed out, "Since the time of Gauss' measurements the earth's dipole moment (strength) has decreased, sensibly linearly (basically a straight line), at approximately the rate of 5% per hundred years. Assuming these rates to persist, our analysis discloses that the dipole moment will vanish in A.D. 3991."⁴⁰ Many scientists rule out a linear decay rate, because all natural decay rates are exponential (mean square method). Using an exponential decay rate, the vanishing date is nearer A.D. 11,000. Since

40. "An Analysis of the Earth's Magnetic Field from 1835 to 1965," ESSA Technical Rept. IER 46-IES 1. U.S. Government Printing Office, p. 15.

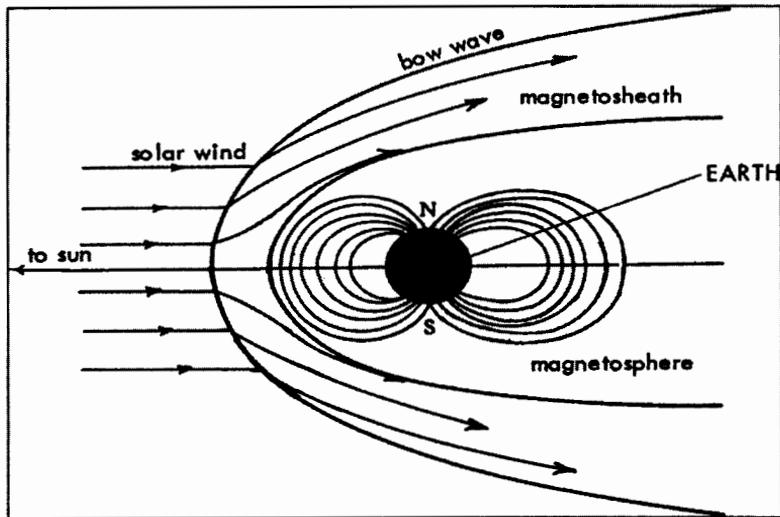


Figure 10.4 Magnetic Field Bow Wave Protects Earth

the magnetic fields protect the earth from solar and cosmic radiation, loss of this shield could alter the earth's environment drastically even before its demise. This increase in radiation is considered detrimental and will cause harmful mutations.

The excessive heat produced by the earth's much stronger electromagnetic field of six thousand to ten thousand years ago limits the period of time that life could have existed on this planet. Attempts to use the C14 dating method on older specimens can produce erroneous higher ages. This is a result of laboratories miscalculating the effect of the magnetic shield by assuming it to be historically in a steady-state condition instead of continually diminishing. As the earth's magnetic field decays, it weakens and permits an increasing entry rate of solar radiation, thus constantly increasing the production level of atmospheric C14.

The diminishing energy level of the earth's magnetic field degrades its shielding capabilities. Therefore, for the future, there is an environmental concern about the magnetic field's ability to protect life on this planet from harmful solar and cosmic radiation. Faithful Christians have no such concerns! This earth is the Lord's Creation, and it will last as long as He deems necessary to complete His purpose of providing a place for Him to produce faithful sons to adopt unto Himself.

Scientific observations of the earth's magnetic field and the Second Law of Thermodynamics (i.e., that energy in all nature irreversibly degrades) provide convincing evidence of a young earth.

POPULATION GROWTH

"The man called his wife's name Eve, because she was the mother of all the living" (Gen. 3:20). This is the answer to life's most important questions: Where did we come from? Who put us here? And when? For those who believe in the Bible's inspiration, the questions are easy to answer.

FACTS: In studying the genetics of women in the present and past populations, scientists can trace them all back to a single female, nicknamed "Eve." By using the latest research methods, scientists date Eve to about sixty-five hundred years ago.

Historians generally date the beginning of human civilization in terms of permanent settlements, use of worked metals, written language, and plant and animal domestication to between six thousand to ten thousand years ago. It should be noted that in every age, past or present, there have been numerous groups of humans who did not live up to these standards of being civilized.

The earth's current population of six billion could easily be generated from eight people in less than forty-five hundred years. If the earth were really billions of years old, the human population would have reached to the clouds and the earth would be full of human bones.

The highly complex ancient languages have, over the subsequent centuries, been reduced to much simpler forms, the oldest being the most difficult. For example, Marathi Sand Script has 500 parts per verb, Greek 250 parts per verb, and ours is the primitive language with only 10 parts per verb. The most difficult languages have evolved into the simple ones, or evolution in reverse. Where these complex languages came from still baffles historians.

DISCUSSION: Each living cell contains billions of bits of genetic information. This tremendous storehouse of information is now being unlocked by gene sequencing techniques. From this information, we can obtain a good estimate of time back to Eve. A recent study of mitochondrial DNA (mtDNA) mutation rates shows that mtDNA is inherited almost exclusively from the mother. DNA mutates at a con-

stant rate; therefore, one might expect mtDNA to provide a reasonable estimate of the lapsed time since the common maternal ancestor of all human beings, Eve.⁴¹ The latest study of the rate of DNA mutation has been measured explicitly and found Eve to date back about sixty-five hundred years. This age can be derived as follows. There is a region in the mtDNA that is known as the control region and appears to be largely without function. The recent study found that there is about one mutation every thirty-three generations in part of this region. Thus, after thirty-three generations, two individuals would be expected to differ by about two mutations in this region, since mutations could occur along two lines of inheritance. After three hundred generations, two individuals would be expected to differ by about eighteen mutations, which is nearly the value that is now observed. This puts the age of the human race at about three hundred generations. Assuming the average generation time of twenty years, this is about six thousand years back to Eve.

Various population growth studies have been done. Most were developed by taking the current world population and applying statistical analysis to the preceding generations, estimating the time between generations and the number of offspring. Many investigators reference the known growth statistics of the nation of Israel, beginning with Isaac to present.⁴² The results correlate with the Biblical account of the present-day civilization going back to the time of the Flood and Noah's family of eight souls.

World population growth rate in recent times is about 2 percent per year. Practicable application of growth rate throughout human history would be about half that number. Wars, disease, famine, etc., have wiped out approximately one-third of the population on average every eighty-two years. Starting with eight people and applying these growth rates since the Flood of Noah's day (about forty-five hundred years ago) would give a total human population at just under six billion people, which is the world's population now. However,

41. Parsons, *Nature Genetics*, Vol. 15, No. 4, 1997, pp. 363-367.

41. Henry Morris, "World Population and Bible Chronology," *Creation Research Society Quarterly*, Vol. 31, Oct. 1966, pp. 7-10; J. H. Hanson, "An Analysis of the Post-Flood Population Growth," *Creation Research Society Quarterly*, Vol. 14, June 1977, pp. 62-69.

application on an evolutionary time scale runs into major difficulties. Starting with one couple just twenty-five thousand years ago would produce a world population of 1.44×10^{11} , or twenty-four times the current population, and forty-one thousand years ago would give us a total population of 2×10^{89} (2 followed by 89 zeros). The universe does not have space to hold so many bodies.

TRUE RADIOMETRIC AGES VERSES SPECULATION

FACTS: Unfortunately, not all scientists attempting to historically date objects or past events are properly using all the facts available to them. As research studies accumulate new knowledge in the various disciplines of science, it is becoming more evident that many in the academic world hold a blind predisposition toward the extremely long ages they felt necessary to validate the theory of evolution. This review of radiometric dating serves to point out how evolutionists, in supporting their belief, are dishonestly using these dating methods. In defending their old-age view of the earth, some scientists will frequently leave out certain facts, distort some of the facts, or just lie about opposing facts.

The radiometric methods discussed below have a very limited application in dating the age of the earth. However, evolutionists use them in attempts to date from the present time back to certain assumed events or time periods and not necessarily to the earth's origin. The methods chosen for review here are the ones commonly used in an attempt to create the concept of an earth 4.7 billion years old.

DISCUSSION:

How Radiometric Clocks Work

In order to estimate the age of rocks, geologists often measure the amount of decay that has occurred in particular radioactive elements. The most common of these so-called long-range clocks utilizes potassium-bearing rocks, which are plentiful in the earth's crust and contain a tiny amount of radioactive potassium (K) that gradually decays into a stable element, argon gas (Ar). Since the use of this K-Ar radiometric clock began in 1965, about 85 percent of the radioactive age selections, on which the modern conventional geological time scale was initially based, were K-Ar determinations.

To make such determinations, certain important assumptions must be made. Measurement involves calculating the rate of decay of the radioactive element (parent material) into an isotope (daughter material). Think of an element's decay process as similar to how an hourglass measures time through the controlled passage of sand from the top bulb to the bottom bulb. Using the analogy of an hourglass, we examine the assumptions necessary to calculate the age of a specific material, in this case K-Ar (radioactive potassium to argon gas).

ASSUMPTION: The decay rate is constant.

THE PROBLEM: Has there been a *constant* decay rate (sand passing through the neck of the hourglass)? The origination and past environment of all radioactive materials is unknown, which raises questions about their rates of decay being steady state from the beginning. There is laboratory evidence that external influences—such as pressure, temperature, electric and magnetic fields, stress, etc.—can change the decay properties.⁴³ For example, in 1987 scientists discovered that when radioactive atoms are in a hot plasma state (such as inside the sun) their decay can be up to one million times faster.⁴⁴ Short-lived man-made radioactive isotopes, made for medical purposes, have a dropping rate of decay during their brief life, not a constant rate. A constant rate of decay is *not* provable.

ASSUMPTION: The rock or material has *always been in a "closed system"* with no outside influences.

THE PROBLEM: This assumes that neither the parent nor daughter concentrations, nor any of the byproducts (some of which are highly mobile gases) have been altered throughout the entire history of the rock, except by radioactive decay (no sand added or removed from either the upper or the lower bulb of the hourglass). This assumption has serious problems. Specimens for analysis cannot be contaminated through leaching of groundwater, airborne elements, or the migra-

43. G. T. Emery, "Perturbations of Nuclear Decay Rates," *Annual Review Nuclear Science*, 1972, Vol. 22, pp. 165–202.

44. Takahashi, Technische Universitat Darmstadt, Darmstadt, Germany, *Physical Review Letters*, 1987, pp. 1522–1527; *Jung Letters*, 1992, pp. 2164–2167; *Bosh Letters*, 1996, pp. 5190–5193.

tion or mixing of a foreign element. Test samples from the same rock invariably give different results, as do other radioactive systems tested in the same rock. For example, John Woodmorappe tabulates more than three hundred of these serious radiometric geological date discrepancies. He reports, "Geologists often disagree on which dates are good. . . . Isotropic dates from the earth's crust span a considerable range—from negative values to ones in excess of 10 billion years."⁴⁵ Dr. Leon Silver of Caltech at the third Lunar Conference in Houston, Texas, challenged the dating of the moon rocks at 3.5 billion and 4.6 billion years old. He pointed out that many of the metals and gases can become heated sufficiently to move freely over the moon.⁴⁶ Dr. Melvin Cook, professor of metallurgy at the University of Utah, also denounced the results of various testing labs as "spurious," since their reported ages for the same rock ranged from thousands to billions of years.⁴⁷

ASSUMPTION: The ratio of a rock's radioactive material to its nonradioactive material at its origin is known.

THE PROBLEM: Trying to determine what portion of a daughter product was primordial and not from decay (this is like looking at an hourglass and trying to guess how much sand was originally in the bottom) is hopeless. For example, 4.7 billion years of the K-Ar process could not begin to produce the quantity of argon in our atmosphere. Or, if all today's atmospheric helium was considered a byproduct in the uranium-to-lead decay process, it could only account for twelve thousand years.

So how much was in the rocks and atmosphere originally? If we do not know how much of an element's primordial nonradioactive material existed, we cannot determine how much has come from the decay process and therefore cannot tell how long the "clock" has been running.

45. John Woodmorappe, *The Mythology of Modern Dating Methods*, Institution of Creation Research, 1999, pp. 87–92.

46. "Scientist Challenges Estimates of Moon Age," *Los Angeles Times*, Jan. 13, 1972.

47. "The Moon Issue," *Science*, Jan. 30, 1970; Dr. M. A. Cook, "Age and Rare Gas Content of Lunar Rocks and Soils," *Science*, 1970.

Place	Source	Historical Date	Radiometric Age—Years
Hawaii	Hualalai	1800–1801 AD	160,000
	Hualalai	1800–1801 AD	to 2,960,000,000
	Kilauea Iki	1959 AD	8,500,000
	Kilauea	< 200 years old	21,000,000
	Kilauea	< 1000 years old	42,900,000
	Kilauea	< 1000 years old	30,300,000
California	Glass Mts.	< 500 years old	12,600,000
	Mt. Lassen	1915 AD	110,000
Arizona	Sunset Crater	1064 AD	260,000
Washington	Mt. St. Helen	Oct. 26, 1980	350,000
Italy	Mt. Stromboli	Sept. 23, 1963	2,400,000
Sicily	Mt. Etna	122 BC	250,000
	Mt. Etna	1972 AD	350,000
	Mt. Etna	May 1964 AD	700,000
Auckland, NZ	Rangitoto	< 800 years old	150,000
Antarctica	Mt. Erebus	1984 AD	640,000
New Zealand	Mt. Ngauruhoe	June 30, 1954	3,500,000
Russia	12 volcanoes	< 300 years	Millions to Billions

Figure 10.5 Volcanic Historic and Radiometric Age Comparison

Only rocks and minerals that were in a molten condition, such as lava, can be dated using the K-Ar radiometric process. Volcanic eruptions provide the ideal “clock” test, comparing the laboratory radiometric analysis of the lava flow to the known date of an eruption. In order to prove the reliability of their dating methods, both the United

<p>Rocks of <i>Known Age</i></p> <hr/> <p><i>Results</i> Radioisotope Dating <i>Does not Work</i></p>	<p>Rocks of <i>Unknown Age</i></p> <hr/> <p><i>Results</i> Radioisotope Dating <i>Assumed Work</i></p>
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Figure 10.6 Radiometric Dating Results

States and Russia did extensive research on volcanoes; the results are shown in the chart in Figure 10.5.⁴⁸

The four necessary assumptions for radiometric dating are *NOT* valid!

1. A constant decay rate.
2. A close system with no loss or gain of parent or daughter elements.
3. Known amounts of parent and daughter present at origin.
4. Testing against known historical dates.

Could you depend on a watch that ran *one hundred thousand times too fast*? They do! Will you believe those scientists using radiometric “clocks” to date the earth’s events and beginning?

CARBON 14 DATING

Dr. Willard Libby, professor at UCLA, invented radiocarbon dating in 1946. This is a process where carbon 14 (radioactive C14) decays into carbon 12 (nonradioactive C12). C14 is created at high altitudes by conversion of some C12 by energy from the earth’s magnetic field and solar radiation. Atmospheric carbon, in this C12 to C14 ratio, is then ingested by plants and thereafter passed on to animals and humans. At death the specimen ceases its intake of both forms of carbon. As

48. G.B. Dalrymple, “⁴⁰Ar/³⁶Ar Analyses of Historic Lava Flows,” *Earth and Planetary Science Letters*, Vol. 6, 1969, pp. 47–55.

C₁₄ decays to C₁₂, at a known rate in the specimen, the ratio between the two forms of carbon increases. This change in the ratio is then measured to give an age since death to the specimen.

The previously listed four radiometric assumptions can be applied to C₁₄ dating, and in some cases with fairly accurate results. The rate of decay is fairly constant.

PROBLEM 1: The assumption is incorrect that C₁₄ is in equilibrium, the rate of formation equaling the rate of decay. Actually, the rate of C₁₄ production exceeds the rate of its absorption into the biosphere. This creates an ever-increasing amount of C₁₄ in the atmosphere and is not a steady-state condition.

PROBLEM 2: This is an “open” system with C₁₄ being created at high altitudes and then being absorbed by the plant life. The specimen to be tested must have been in a protected environment since its death, with no contamination. Few items can meet this qualification.

PROBLEM 3: The atmospheric creation of C₁₄ has *not* been constant. Earth’s weakening magnetic field increases the production of C₁₄. The amount of C₁₂ produced in the atmosphere can increase by natural events, such as volcanoes, or man-made environmental changes, such as caused by the industrial revolution, or even elevation and environment. These and other variants cause the C₁₂ to C₁₄ ratio to vary. This results in the false appearance of excessive age.⁴⁹

PROBLEM 4: Radiocarbon dating does agree with some known dates, but not always. Some ages concur with tree ring dates, known historical artifacts, etc. Only the dates from results of multiple tests, and preferably by several labs, should be considered.

PROBLEM 5: Modern technology has produced a major problem for the evolutionist. Advanced technology—the ion beam accelerator and the mass spectrometer (AMS)—allowed the ability to measure the ratio of C₁₄ atoms to C₁₂ atoms with extreme precision. The C₁₄:C₁₂ ratio can now be measured to the value of 0.001 percent of the modern value, which gives the theoretical range of ninety thousand years. The prob-

49. W. F. Libby, “Addendum to Chapters 1 & 2,” *Radiocarbon Dating*, University of Chicago Press, 1965, p. ix.

lem is that no fossil material has been found even approaching this low value! *All* objects tested date less than sixty thousand years old.

The simple statement that can summarize the conclusions above is that there are really no reliable long-term radiometric “clocks,” and even the short-term radiocarbon “clock” is in serious need of repair.

CARBON 14 PRODUCTION IS YOUNG

FACTS: Many people have the mistaken notion that the radioactive C₁₄ dating technique places the age of the earth at billions of years and various rocks at millions of years. But, in reality, the C₁₄ method is only valid for “recent” times. The C₁₄ decay process has the possibility of giving true dates that are immeasurable beyond sixty thousand years, and its inaccuracies are well known. On the other hand, this process can be used to date the earth to be less than ten thousand years old.

DISCUSSION: If the earth is very old, the rate of production of C₁₄ in the upper atmosphere should be equal to the rate of decay, a steady-state condition. This equilibrium condition would have been reached when the rate of decay of C₁₄ became equal to the rate of production of C₁₄.

An analogy to help understand this process is that of a barrel, with many small holes in the bottom, that is being filled with water at a constant high rate of flow. At the beginning of this filling process, a small amount of incoming water, being under light pressure, leaks out of the holes slowly. But, as the incoming flow raises the level of water in the barrel, it causes a steady increase in pressure at the bottom, which forces an increasing outflow volume. The higher the water level, the faster water streams out the bottom holes and the slower the level rises, until at some point the level of the water in the barrel stabilizes (a steady-state condition). The pressure at that level is now forcing water out of the holes as fast as it is entering the barrel.

The analogy is simple. The fluid in this analogy represents C₁₄. The fluid flowing into the barrel replicates C₁₄ entering the atmospheric reservoir. The fluid flowing out through the holes represents the absorption of C₁₄ out of the atmospheric reservoir and into the biosphere. And, increasing outflow reflects an increasing amount of

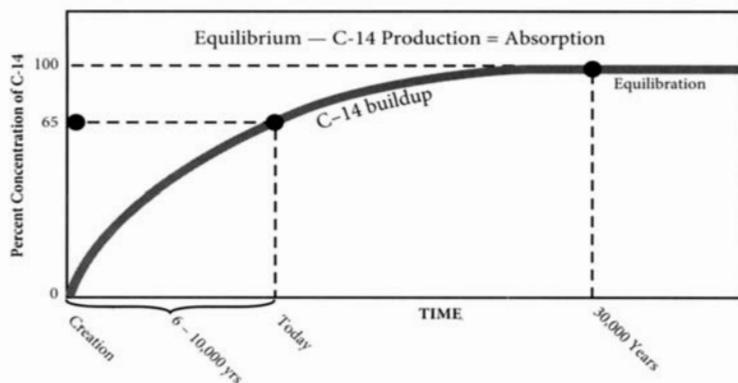


Figure 10.7 Historical and Projected Buildup of Carbon-14 Concentration in the Atmosphere

C₁₄ being absorbed into the biosphere until equilibrium is reached. In about one-third the time it takes to reach an inflow/outflow equilibrium (steady-state) level of fluid in the barrel, or C₁₄ level in the atmospheric reservoir, the level has now risen to two-thirds its final equilibrium level. The present rate of C₁₄ inflow/outflow in the atmospheric reservoir has been calculated to go from zero to a steady state of equilibrium in thirty thousand years.⁵⁰

Three observations can be made:

1. The earth cannot be more than thirty thousand years old.
2. The present level of C₁₄ in the atmospheric reservoir can account for only about six thousand to eight thousand years.
3. A fundamental assumption used in radiometric dating, that C₁₄/C₁₂ is in a steady-state condition, is invalidated.

CONCLUSION CONCERNING THE AGE OF THE UNIVERSE

God formed His Creation complete with the fully functioning natural processes of a young earth. Research has been able to reveal the limited time span of some of these natural processes. It is only through many unproven assumptions related to these processes that the earth

50. Harold S. Slusher, *Critique of Radiometric Dating*, Institution of Creation Research, 1973, pp. 39-40.

can be said to be 4.7 billion years old. The above facts speak for themselves and portray a young solar system that could only be about six thousand years old and had complete maturity at its beginning. Without the support of billions of years, the evolutionist's theory collapses like a deck of cards. Which card of life will you play, God's Creation, or Satan's evolution? Remember Eve? She believed Satan's lie and lost the privilege of living in Paradise. So can you!

11

SCIENTIFIC DIFFICULTIES OF THE EVOLUTION THEORY



INTRODUCTION

Bible-believing people object to the teaching of the theory of evolution because it contradicts true science and God's account of Creation. This chapter provides scientific information as a strong reason for not believing in evolution and for objecting to evolution as a "fact."

The student needs to learn what all leading scientists already know—that the theory of evolution has *never* been proven as a fact. The student also ought to be told that this theory is encumbered with serious difficulties. Yet, many authors who know this still make rash assertions as to the "fact" of evolution.

One high school textbook reads, "All reputable biologists have agreed that evolution of life on earth is an established fact."¹ Another textbook used nationally reads, "Biologists are convinced that the human species evolved from non-human forms."² Many students have come to accept such statements without question. But the truth of the matter is far from what is asserted in the above quotations. Not all scientists, not all biologists, accept the statement that "evolution is an established fact." For example, Dr. W. R. Thompson, who was for many years director of the Commonwealth Institute of Biological Control in Ottawa, Canada, and a world-renowned biologist, wrote in his foreword to the 1956 edition of Darwin's *Origin of the Species*, published in the *Darwinian Centennial Year as a part of the Everyman's Library Series*:

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1. B. B. Vance and D. F. Miller, *Biology for You*, J. B. Lippincott Co., 1950, p. 580.
 2. *Biological Science: Molecule to Man*, Blue Version, Houghton Mifflin Co., 1951, p. 414.

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 credibility with the public by the suppression of criticism and the elimination of difficulties, is abnormal and undesirable in science.³

Dr. G. A. Kerkut, professor of physiology and biochemistry at the University of Southampton, England, and himself an evolutionist, states:

This theory can be called the General Theory of Evolution and the evidence that supports it is not sufficiently strong to allow us to consider it as anything more than a working hypothesis. The answer [to the problem of evolution] will be found by future experimental work and not by dogmatic assertions that the General Theory of Evolution must be correct because there is nothing else that will satisfactorily take its place.⁴

Kerkut's book caused considerable anguish in the evolutionist camp. John T. Bonner, a bona fide evolutionist, wrote in review of Kerkut's book:

This is a book with a disturbing message; it points to some unseemly cracks in the foundation. One is disturbed because what is 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. It is another one of those cold uncompromising situations where the naked truth and human nature travel in different directions. The particular truth is simply that we have no reliable evidence as to the evolutionary sequence of invertebrate phyla. We do not know whether Protozoa occurred once, or twice, or many times. . . . We have all been telling our students for years not to accept any statement on its face value but to examine the

3. Charles Dawin, "Foreword" by Dr. W. R. Thompson, *Origin of the Species*, Everyman's Library Series, 1967.

4. G. A. Kerkut, *The Implications of Evolution*, Pergamon Press, 1960, p. 157.

evidence, and therefore, it is rather a shock to discover that we have failed to follow our own sound advice.⁵

In the above five quotations, the last three indicate clearly that the first two were simply assertions void of virtue or fact. Evolution is not an “established fact” accepted without dispute by scientists. The author or teacher who so states is either ignorant of the facts in the case or is seeking to hide them from his students. The world-famous evolutionist Steven Gould wrote, “Scientists, like others, *sometimes tell deliberate lies* because they believe that small lies can serve big truths.”⁶ Student—Keep this in mind! There is a “*great divergence of opinion among biologists*” as to evolution. This is because “*the evidence is unsatisfactory and does not permit any certain conclusion.*”

We agree with Ludwig von Bertalanffy, a distinguished biologist, who wrote:

The fact that a theory so vague, so insufficiently verifiable, and so far from the criteria otherwise applied in “hard” science has become a dogma can only be explained on sociological grounds. . . . The point, however, is that the doctrine of evolution has swept the world, not on the strength of its scientific merits, but precisely in its capacity as a Gnostic myth. It affirms, in effect, that living beings created themselves, which is in essence a *metaphysical* claim. This in itself implies, however, that the theory is scientifically unverifiable. Thus, in the final analysis, evolutionism is in truth a metaphysical doctrine decked out in scientific garb.⁷

EXAMINE THE EVIDENCE

Students should follow the advice of the scientist, as suggested by Dr. John T. Bonner, and not accept any statement on its face value but rather examine the evidence. Ask questions, point out contradictions, and ask for proof when assertions are made. In the following pages, certain scientific fields will be examined and pertinent questions asked within those disciplines as to the validity of evolution. These questions bear upon evolution and should be weighed by the

5. “Review of Kerkut’s Book,” *American Scientist*, Vol. 49, June 1961, p. 240.

6. Stephen J. Gould, *The Mismeasure of Man*, New York Review of Books, Oct. 22, 1981.

7. Wolfgang Smith, *Teihardism and the New Religion*, Tan Books & Pub., 1988, pp. 9, 242.

teacher and the student in search of scientific truth. Those seeking the truth will not avoid difficulties that challenge their theories. Study these questions until you fully understand them and how they relate to evolution in that given field of study. Seek to cause others to see this also. Use textbooks or a dictionary for the definitions in each field of study.

ANTHROPOLOGY (STUDY OF MAN'S ANCESTORS)

The evolutionist contends that there are three stages in the evolution of man: (1) the australopithecine ape-man; (2) *Homo erectus*, the first true men; and (3) early *Homo sapiens*, our own species. Evolutionists still struggle to develop the concept of separate species, particularly *Homo erectus*, the missing link. The following questions reflect that difficulty.

QUESTION: How much evidence and agreement do scientists have about the ancestry of man?

FACT 1: There is little evidence available for examination. "All that palaeoanthropologists have to show for more than 100 years of digging are remains from fewer than 2000 of our supposed ancestors. They have used this assortment of jawbones, teeth and fossilized scraps, together with molecular evidence from living species, to piece together a line of human descent going back 5 to 8 million years of time when humans and chimpanzees diverged from a common ancestor."⁸

"Still, doubts about the sequence of man's emergence remain. Scientists concede that even their most cherished theories are based on embarrassingly few fossil fragments, and that huge gaps exist in the fossil record. Anthropologists, ruefully says Alan Mann of the University of Pennsylvania, 'are like the blind men looking at the elephant, each sampling only a small part of the total reality.' His colleagues agree that the picture of man's origin is far from complete."⁹

FACT 2: The evolutionary stages of man are mostly theory and imaginations. "In fact, 'virtually all our theories about human origins were

8. Colin Tudge, "Human Origins: A Family Feud," *New Scientist*, Vol. 146, May 20, 1995, p. 24.

9. Anonymous, "Puzzling Out Man's Ascent," *Time*, November 7, 1977, p. 77.

relatively unconstrained by fossil data,' observes David Pilbeam. 'The theories are . . . fossil-free or in some cases even fossil-proof.'¹⁰ And, as Marvin L. Lubenow wrote:

We have all seen pictures of the impressive sequence allegedly leading to modern humans—those small primitive stooped creatures gradually evolving into big, beautiful you and me. What is not generally known is that this sequence, impressive as it seems, is a very artificial and arbitrary arrangement because: (1) some fossils are selectively excluded if they do not fit well into the evolutionary scheme; (2) some fossils are arbitrarily downgraded to make them appear to be evolutionary ancestors when they are in fact humans; and (3) some nonhuman fossils are upgraded to make them appear to be human ancestors.¹¹

QUESTION: Have not "modern" human remains been found fossilized in ancient strata?

FACT 1: Human remains of a modern man, a woman, and two children were found at Castenedolo, Italy, by Professor Ragazzoni. These were found while digging for mollusks in a Pliocene strata (15 million years old as dated by evolutionists). "As the student of prehistoric man reads and studies the records of the 'Castenedolo' find, a feeling of incredulity rises within him. He cannot reject the discovery as false without doing injury to his sense of truth, and he cannot accept it without shattering his accepted beliefs. It is clear that we cannot pass Castenedolo by in silence: all the modern problems relating to the origin and antiquity of modern man focus themselves around it."¹²

FACT 2: The Calaveras Skull found in Calaveras County, California was taken from a tunnel dug 150 feet underground below 100 feet of solid Sierra lava flow. With the skull were found man-made stone implements and some extinct fossils of the early Pliocene strata (15 million years old as dated by evolutionists). As Professor W. H. Holmes put it: "To suppose that man could have remained unchanged physically, mentally, socially, industrially and aesthetically for a mil-

10. Roger Lewin, *Bones of Contention*, Simon and Schuster, 1987, p. 43.

11. Marvin L. Lubenow, *Bones of Contention*, Backer Books, 1992, p. 21.

12. Sir Arthur Keith, *The Antiquity of Man*, p. 119.

lion years, roughly speaking (and all this implied by the evidence furnished), seems in the present state of our knowledge hardly less than admitting a miracle.”¹³

FACT 3: Many fossil human footprints have been found in supposedly old formations. Among them is a pair of human sandal prints found in 1969 at Antelope Springs, Utah, in Cambrian rock (400 million years old as dated by evolutionists) along with fossil trilobites, one in the heel of the left print. Another discovery is the several dozen human footprints found among dinosaur prints along the Paluxy River at Glen Rose, Texas. Both are in cretaceous rock (about 100 million years old as dated by evolutionists).

FACT 4: “The Western European classic Neanderthal type was altogether a too complete answer to Darwinian prayers. Heretical and non-conforming fossil men were banished to the limbo of dark museum cupboards, forgotten or even destroyed.”¹⁴

AUSTRALOPITHECINE (APE-MEN)

QUESTION: Does the actual fossil record show that fossils that are indistinguishable from modern humans can be traced back on the evolutionary time scale (4.5 million years old as dated by evolutionists), which is before the australopithecines appear in the fossil record?

FACT 1: Australopithecine authority Charles Oxnard, of the University of Western Australia, concludes: “The genus *Homo* may, in fact, be so ancient as to parallel entirely the genus *Australopithecus*, thus denying the latter a direct place in the human lineage.”¹⁵

FACT 2: A Composite Fossil Chart, according to the evolution time scale, reveals anatomically that modern humanlike fossils predate and coincide with the dates given to australopithecine fossils.¹⁶

13. Dr. Douglas Dewar, *The Transformist Illusion*, Dehoff Publications, 1957.

14. Prof. E. A. Hooton, *Apes, Men, and Morons*, Putnam's, 1938, p. 107.

15. Charles E. Oxnard, “The Place of the Australopithecines in Human Evolution: Grounds for Doubt?” *Nature*, Vol. 258, Dec. 4. 1975, p. 389.

16. Lubenow, *Bones of Contention*, pp. 170–171.

HOMO ERECTUS (MISSING LINK)

QUESTION: Do scientists consider the Java Man to be the missing link?

FACT 1: It would be impossible to exaggerate the importance of this group of fossils known collectively as *Homo erectus*. For the evolutionist, *Homo erectus* is the major category bridging the gap between australopithecines (nonhuman) and *Homo sapiens* (human).

FACT 2: The Java Man (*Homo erectus*) was created by an army doctor, E. Dubois, while searching in the Dutch East Indies for the “missing link.” In 1891, he constructed the Java Man from a thigh bone (femur), a few teeth, and a fragment of a cranium (skullcap). These were found, along with many other fossils, by the fifty untrained workers he hired to dig for fossils along a riverbank. Unfortunately, this made it impossible to tell the origin of the many fossils found, which is critical in dating them. For example, two very large modern skulls (Wadjak skulls) found in the same general location, which Dr. E. Dubois kept hidden for twenty-five years, are now discredited for being of vague geology. Why not the Java Man fossils found with them that were held from view in Dr. E. Dubois’s closet for over twenty-five years? Dr. Hrdlika reported that “None of the published illustrations or casts now in various museums are accurate. The jaw fragment was from another and later type man. The femur is without doubt human.”¹⁷

FACT 3: One of the most amazing facets of the Java Man saga is that in all the years of the twentieth century, the skullcap and femur together have been presented to the public as Java Man. The most respected anatomists from the time of their discovery until today have always associated the skullcap with the femur. Yet, they recognize the femur as typical of modern man and they associated the *skullcap with an ape species*. Here is the problem faced by evolutionists: If the skullcap and the femur actually belong together (and they do), then it is difficult to maintain an Ape-Man species (represented by the skullcap) and modern man (represented by human femur).¹⁸ In addition, these

17. Dr. Hrdlika, “Skeleton In a Closet,” *Science*, June 15, 1923.

18. Bert Theunissen, *Eugene Dubois and the Ape-Man from Java*, Kluwer Academic Pub., 1989, p. 158.

fossils should be removed as evidence of human evolution because fluorine analysis indicates that they are both the same age.¹⁹ Sir Arthur Keith, the famed Cambridge anatomist, stated that “the *Java Man skullcap was distinctly human* and well within the range of humans living today.”²⁰

QUESTION: Is it possible that the apelike skeletons of some of the Neanderthal Men could have been caused by disease?

FACT 1: The first Neanderthal skeleton was found in 1908 at La Chapelle-aux-Saints, and it is used as a model in textbooks. Drs. W. L. Straus and A. J. E. Cave of Johns Hopkins University, Laboratory of Physical Anthropology and the Department of Anatomy, examined it. Their findings were delivered in a symposium commemorating the fiftieth anniversary of the discovery of the Neanderthal Man. They state that there is positive evidence that the first skeleton had osteoarthritis. “There is nothing about the Neanderthal man that would necessarily cause him to walk differently than ourselves. Yet Neanderthal man with ‘arthritis’ has been posing for half a century in museums and countless textbooks, illustrating the supposed transition from ‘stooped-over’ to ‘erect.’”²¹

FACT 2: Some Neanderthal remains are an excellent parallel to the modern description of acromegaly, a chronic disease characterized by bone thickening of adults. As one medical textbook describes the disease, it eventually causes “apelike features” (see any medical book for a description of this bone growth disorder). People today with this disease (1 in 10,000) have skeletons comparable to those of the Neanderthal. As evidence that it was a disease among some adult types, “the remains of young Neanderthal children (such as the Gibraltar Neanderthal Child) appear as children would today, showing no signs of this bone disorder which gave an ‘apelike’ appearance to adults.”²²

19. G. H. R. von Koenigswald, *Meeting Prehistoric Man*, trans. Michael Bullock, Harper and Brothers, 1956, p. 34.

20. Robert F. Heizer, ed., *Man's Discovery of His Past*, Prentice Hall Inc., 1962, p. 138.

21. Drs. W. L. Straus and A. J. E. Cave, “Pathology and the Posture of Neanderthal,” *Quarterly Review of Biology*, Dec. 1957, pp. 348–363.

22. Cromwell, *The Making of Man*, Phoenix House Ltd., p. 55.

QUESTION: Can the Neanderthal Man be classed as modern in stature?

FACT 1: "There is no valid reason for the assumption that the posture of Neanderthal Man of the fourth glacial period differed significantly from that of the present-day man."²³

FACT 2: All of its features fall within the range of variation found in modern man.²⁴

FACT 3: "The time has come to reappraise one of the most foully slandered creatures ever to walk the earth—the Neanderthal man. . . . Shaved and barbered and dressed in a modern suit of clothes, Neanderthal Man would probably attract little attention in a crowd at a football game."²⁵

QUESTION: Did the Neanderthal race live in modern times?

FACT 1: The Neanderthal skull known as Amud I from Upper Galilee, Israel, was found as a burial just below the top of layer BI. The radiocarbon date for the Upper BI is 3,710 B.C. If Amud I was buried into layer BI, it follows that he cannot be older than Layer BI, but could be younger.

PALEONTOLOGY (STUDY OF ANCIENT ANIMAL LIFE)

QUESTION: Do paleontologists agree that the fossil record substantiates the theory of evolution?

FACT 1: "The sudden emergence of major adaptive types, as seen in the abrupt appearance in the fossil record of families and orders, continue to give trouble. The phenomena lay in the genetically no map's land beyond the limits of experimentation. A few paleontologists even today cling to the idea that these gaps will be closed by further collecting, i.e. that they are accidents of sampling; but most regard the observed discontinuities as real, and have sought an explanation for them."²⁶

23. Straus and Cave, "Pathology and Posture."

24. Ibid.

25. Daniel Cohen, *Science Digest*, Oct. 1968, pp. 13–18.

26. D. Dwight Davis, *Genetics, Paleontology, and Evolution*, Princeton University Press, 1949, p. 74.

FACT 2: "No matter how far back we go in the fossil records of previous animal life upon the earth we find no trace of any animal forms which are intermediate between various major groups or phyla. The greatest groups of animal life do not merge into one another. They are and have been fixed from the begin. . . . No animals are known even from the earliest rocks which cannot at once be assigned to their proper phylum or major group."²⁷

FACT 3: "So we see that the fossil record, the actual history of the animal life on earth, bears out the assumption that at its very first appearance animal life in its broader features was essentially the same as that which we now know it. . . . Thus, so far as concerns the major groups of animals, the creationists seem to have the better of the argument. There is not the slightest evidence that any of the major groups arose from any other."²⁸

FACT 4: Charles Darwin wrote: "Long before the reader has arrived at this part of my work, a crowd of difficulties will have occurred to him. Why, if species have descended from other species by fine gradations, do we not everywhere see innumerable transitional forms? Why is not all nature in confusion, instead of the species being, as we see them, well defined?"²⁹ "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 this theory."³⁰

FACT 5: Dr. George Gaylord Simpson, a world-famous paleontologist, wrote, "The facts are that many species and genera, indeed the majority, do appear suddenly in the record, differing sharply and in many ways from any earlier groups, and that this appearance of discontinuity becomes more common the higher the level, until it is virtually universal as regards orders and all higher steps in the taxo-

27. Dr. A. H. Clark, *The New Evolution: Zoogenesis*, Williams and Wilkins, 1930, p. 189.

28. Dr. A. H. Clark, *Quarterly Review of Biology*, Dec. 1928, p. 539.

29. Charles Darwin, *The Origin of the Species*, The New American Library, 1964, p. 158.

30. Charles Darwin, *The Origin of the Species*, Everyman's Library Edition, 1967, pp.

292-293.

nomie hierarchy. This essentially paleontological problem is also of crucial interest for all other biologists, and since there is such a conflict of opinion, non-paleontologists may choose either to believe the authority who agrees with their prejudices, or to discard the evidence as worthless.”³¹ Discussing the lack of fossil evidence for transitional forms leading up to the thirty-two orders of mammals, Dr. Simpson says, “This regular absence of transitional forms is not confined to mammals, but is an almost universal phenomenon, as has long been noted by paleontologists.”³²

QUESTION: Does the Precambrian strata contain evidence of any form of life leading up to and into the Cambrian era, which contains over five thousand species of animals?

FACT 1: Darwin wrote: “To the question why we do not find rich fossiliferous deposits belonging to these assumed earliest periods prior to the Cambrian system, I can give no satisfactory answer. I look at the geological record as a history of the world imperfectly kept. Nevertheless, the difficulty of assigning any good reason for the absence of vast piles of strata rich in fossils beneath the Cambrian system is very great.”³³

FACT 2: “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. He said of it: ‘the case at present must remain inexplicable; and may be truly urged as a valid argument against the views here entertained’ (Darwin, Chapter X). Darwin’s case is still not clearly explained with sufficient positive evidence.”³⁴

“Fossils would provide the only direct evidence of the earliest living things, but none have been found, and it is improbable that any exist in a form still recognizable.”³⁵ These statements were made by

31. George Gaylord Simpson, *Tempo and Mode in Evolution*, Columbia University Press, 1944, p. 99.

32. *Ibid.*, p. 106

33. Charles Darwin, *The Origin of the Species*, The New American Library, 1964, p. 309.

34. George Gaylord Simpson, “The History of Life,” in *The Evolution of Life*, Vol. 1 of *Evolution after Darwin*, University of Chicago Press, 1960, p. 143.

35. George Gaylord Simpson, “Biological Sciences,” *The Great Ideas of Today Yearbook*, 1965, Encyclopedia Britannica, Inc., p. 292.

one of the world's leading paleontologists and authority on evolution, Dr. Simpson. He was deeply disturbed by the absence of Precambrian fossils, calling it "the major mystery of the history of life."³⁶

FACT 3: Dr. Simpson speculated that "Molecular and organismal biologists are now beginning a cooperation that will surely prove fruitful. Numerous efforts have been initiated in the last year or so to interpret molecular biology in evolutionary terms. It is too early to say just what the results will be, but they are certainly promising."³⁷

NOTE: George Gaylord Simpson was a paleontologist at Harvard University, and formerly professor of vertebrate paleontology at Columbia University. Before that he was curator of fossil mammals and birds at the American Museum of Natural History in New York City. He is a world-renowned paleontologist and ardent evolutionist, and yet in 1965 he admitted that the fossil record does not prove evolution and referred us to the field of biology, hopeful it would soon bear fruit to prove evolution. Simpson even returned to the disproved theory of spontaneous generation hoping to save his theory, saying, "The spontaneous generation of the first living things did occur."³⁸ What proof did he offer? None! Just an empty assertion!

Isn't it strange indeed that evolutionary scientists leave their own field and point the student to another for the "proof" of the theory of evolution?

NOTE: This evidence is devastating to the theory of evolution—the fossil records *do not* indicate that any one kind of plant or animal ever changed into another. Paleontologists know this and state it. Teachers should do the same.

COMPARATIVE ANATOMY

QUESTION: Are scientists in the field of comparative anatomy in agreement that there exists a known evolutionary scale indicating which animals evolved from which animals?

36. George Gaylord Simpson, *The Meaning of Evolution*, Yale University Press, 1949, p. 315.

37. *Ibid.*

38. *Ibid.*

FACT 1: "It is an unfortunate truth that fossils do not emerge from the ground with labels already attached to them. And it is bad enough that much of the labeling was done in the name of egoism and a naive lack of appreciation of variation between individuals; each nuance in shape was taken to indicate a difference in type rather than natural variation within a population. This problem has in some part been eased in the half-century since Hooton made his pithy remarks. But it remains inescapably true that applying the correct label is astonishingly difficult, not least because such labels are in a sense arbitrary abstractions; and especially so when the material on which the analysis is being done is fragmentary and eroded. 'It is an incredibly difficult problem,' says Lord Zuckerman. 'It is one so difficult that I think it would be legitimate to despair that one could ever turn it into a science.'"³⁹

"The all-too-frequent picture of evolution as a progression from amoeba to man is, and always has been, utterly without foundation."⁴⁰

FACT 2: Alfred S. Romer, the famous comparative anatomist of Harvard University, wrote, "The known presence of parallelisms [similarities of structure in different animal groups] in so many cases and its suspected presence in others suggest that it may have been an almost universal phenomenon. A close student of the subject may, if pressed, be driven to the logical though absurd admission of the possibility that two animals as closely related as, for example, chimpanzee and gorilla may have evolved in parallel fashion all the way from a piscine stage [ancestral fish]."⁴¹

FACT 3: Because the "evolutionary tree" is constantly being altered, Professor Weidenreich, the famous anthropologist of the University of Chicago, commented, "Unfortunately, there is no objective gauge which can be used for measurement of the grade of morphological deviations and for the determination of the limits between individual, specific, and generic variants. Such a distinction is left entirely to the

39. Lewin, *Bones of Contention*, p. 43.

40. Prof. Paul Weisz, *The Science of Biology*, McGraw Hill Book Co., 1959, p. 655.

41. Jepsen, *Genetics, Paleontology, and Evolution*, Princeton University Press, 1949, p. 115.

'opinions of naturalists having sound judgment and wide experiences,' as Darwin put it. . . . No fossil type of man has been discovered so far whose characteristic features may not easily be traced back to modern man."⁴²

FACT 4: Professor Hooton of Harvard said, "I am convinced that a zoological classificationist may be as dissolute and irresponsible as a lightning-rod salesman."⁴³

QUESTION: Do the various displays of the supposed evolved horse have difficulties and contradictions in the models?

FACT 1: The anatomy of the various models does not compare. For example, the rib count varies back and forth from fifteen to nineteen, and the lumbar of the backbone vary back and forth from six to eight. Many eminent scientists disagree on which is the theoretical chain of fossil horses, as selected from the over 250 available specimens. Some of these skeletal structures are significantly larger than their supposed descendants.

FACT 2: "It is a matter of faith that the textbook pictures are true, or even that they are the best representations of the truth that are available to us at the present time."⁴⁴

FACT 3: The American Museum of Natural History in New York City describes the difference between the "Dawn Horse" (first horse) and the Equus (modern horse) in its *Guide Leaflet Series 36*: "The proportion of the skull, the short neck, and arched back, and the limbs of moderate length, were very little horse-like, recalling on the contrary, some modern carnivorous animals, especially the Civets (cats)."

Many scientists have concluded that the Hyrax, currently living in Africa, is the descendant of the Eohippus ("Dawn Horse"). The similarity is extremely striking. Both are the size of a rabbit, live in thickets, appear to have the same lifestyle, and have four toes on the fore limbs and three toes on the hind limbs.

42. Franz von Weidenreich, *Apes, Giants and Man*, University of Chicago Press, 1918, p. 2.

43. Hooton, *Apes, Men, and Morons*, p. 115.

44. G. A. Kerkut, *Implications of Evolution*, Pergamon Press, 1960, p. 148.

FACT 4: Two recently discovered fossil remains of horses (*Equus Nevadenis* and *Equus Occidentalis*) are identical to today's horses (*Equus*). These two species appear with remains of saber-toothed tigers that are also known to be contemporary with the "Dawn Horse." So, modern horses appeared in full bloom during the Oligocene Age (which evolutionists date to 30 million years ago) along with their supposed ancestors, the "Dawn Horse" and the saber-toothed tiger.⁴⁵

NOTE: Present-day paleontologists are aware that not only does a living copy of the supposed "Dawn Horse" exist today, but that full-size fossil remains of the "modern horse" have been found in supposed ancient strata where its presumed small ancestors were to have begun evolution.

QUESTION: Do not evolutionists teach that descendant species tend to become more complex and increase in size?

FACT 1: Actually, the fossil record shows that about one-third of today's animals descended from much larger ancestors. The following are examples of larger to smaller. Fossilized dragonflies reveal they were just like today's, except much larger, some having an eighteen-inch wingspread. Fossil remains of sloths show that they originally weighed up to four tons. The elephant's predecessors were much larger mastodons.

FACT 2: A third of all prehistoric animal, such as dinosaurs, saber-toothed tigers, the dodo bird, etc., have become extinct.

FACT 3: And, about one-third of today's living species of animal life have remained unchanged in the fossil record. Many of today's living species are seashell life and can be found in the fossil record not to have changed from the earliest life of the Cambrian time.

BIOLOGY

QUESTION: Do biologists teach, as a scientific fact, that transmutations cause new groups of animals?

45. Frank W. Cousin, *The Alleged Evolution of the Horse*, Symposium on Creation III, Baker Book House, 1971.

FACT 1: All biology textbooks reveal that there is no laboratory experiment, discovery, or other proof that transmutations can actually occur. The very opposite is true. Biologists accept Mendel's Law of Heredity, or like begets like, as a scientific truth. This law recognizes variations caused by breeding or mutations that are the result of different heredity or physical alterations within the original species. Biologists know that scientists can classify animals into species based of their chromosomes.

FACT 2: All recognize "microevolution" results from mutations within a family of plants or animals. It is "megaevolution," proving one family "evolved" via transmutations into another, that has defied proof.

QUESTION: Do biologists believe that the Law of Biogenesis, life begets life, can be disproved?

FACT 1: Biologists know that it takes life to beget life. This fact was proved by Louis Pasteur's Swan-neck Flask Experiment in 1860, which refuted the theory of life beginning by spontaneous generation and was called a victory for the biologists. Current biology textbooks begin by teaching this law as accepted, for no one has been able to disprove it. According to modern science, life does not originate from nonliving material.

FACT 2: Then it follows that the first Creation of life on this earth must have preceded the Law of Biogenesis (life begets life).

QUESTION: Why do biologists who believe in evolution point students to the fields of paleontology and comparative anatomy for the "proof" of their theory?

FACT 1: "Biologists are convinced that the human species evolved from non-human forms. They base their conclusions on the fossils of primates, and on comparisons of human structures and functions with those of other living primates."⁴⁶

NOTE: The study of the "fossils of primates" is in the field of paleontology; the "comparison of human structures" is in the discipline of comparative anatomy. *Why* are biologists going over to those fields

46. *Biological Science*, p. 414.

to draw their conclusions? This is a tacit admission that *no proof lies in the field of biology* for the theory of evolution, and we have already seen that paleontologists and comparative anatomists *deny they have the solid evidence for the theory*. In fact, they believe the hope of its proof lies with the biologists—in molecular biology as previously noted.

QUESTION: Why do biologists rely on mutations to be the mechanism of evolution?

FACT 1: Professor Dobzhansky, one of the outstanding geneticists of today, made the following statements:

“The process of mutation is the only known source of new materials of genetic variability, and hence evolution.”⁴⁷

“Most mutations which arise in any organism are more or less disadvantageous to their possessors. The classical mutants obtained in *Drosophila* (fruit fly) usually show deterioration, breakdown, and the disappearance of some organs.”⁴⁸

“The deleterious character of most mutations seems to be a very serious difficulty.”⁴⁹

FACT 2: Dr. L. B. Dunn, professor of zoology at Columbia University, writes that “Such events, known as mutations, are the ultimate source of the hereditary variety characteristic of all species. It is this variety upon which the natural selection and other evolutionary forces act in forming varieties, races, species, and other natural categories.”⁵⁰

QUESTION: Do mutations make new structures and organs?

FACT 1: Mutations are known to cause only one of the following four genetic alterations in a living structure: (1) Complete *removal* of the structure, (2) *relocation* of the structure, (3) an *abnormal multiplication* of the structure, and (4) a *varying of the size or coloring* of the

47. Sinnot, Dunn, and Dobzhansky, *Principles of Genetics*, 4th ed., Macmillan, 1950, p. 315.

48. Theodosius Dobzhansky, *Evolution, Genetics, and Man*, Wiley and Sons, 1955, p. 105.

49. *Ibid.*

50. Dunn, *Heredity and Evolution in Human Populations*, Harvard University Press, 1959, p. 7.

structure. Mutations only vary existing genes; they do not create new genes. Therefore, they are not a source for adding a new structure to any living plant or animal. "In cases of homeosis in which a single gene may, as in the fruit fly (*Drosophila melanogaster*), replace antennae by legs, certain mouthparts by legs, balancers by wings, etc., the gene is to be looked upon not as a germinal representative of the whole complex structure but as a switch which alters conditions so as to set going a long established reaction system in a strange location."⁵¹

FACT 2: To go from the first cell to a human means finding a tremendous amount of information—billions of base pairs in our DNA. This includes the recipes to build eyes, nerves, bone, skin, muscles, blood, etc. Evolution relies on cells mutating by copying errors and natural selection to generate the required new information. Actually, these cause a *loss* of information. Biophysicist Dr. Lee Spetner of Johns Hopkins University taught that "In all the reading I've done in the life-sciences literature, I've never found a mutation that added information. All point mutations that have been studied on the molecular level turn out to reduce the genetic information and not to increase it. . . . A business can't make money by losing a little at a time."⁵²

FACT 3: Dr. Hooton of Harvard, "Saltatory evolution by way of mutation, is a very convenient way of bridging over gaps between animal forms. Now I am afraid that many anthropologists (including myself) have sinned against genetic science and are leaning upon a broken reed when we depend upon mutations."⁵³

PHYSICS

QUESTION: Since the radiocarbon (C_{14}) method of dating is based on the assumption that the amount of C_{14} in the atmosphere has been constant, has it been proven to be constant?

FACT 1: "Radiocarbon dating is based on the incorrect assumption that C_{14} is in equilibrium, the rate of formation equaling the rate of

51. Sewell Wright, "Evolution," *Encyclopedia Britannica*, 1957 ed.

52. L. Spetner, *Not by Chance*, The Judaica Press, 1997, pp. 131-143. See review in *Creation Ex Nihilo*, Vol. 20, No. 1, Dec. 1997-Feb. 1998, pp. 50-51.

53. Hooton, *Apes, Men, and Morons*, p. 118.

decay. But recent data show the rate of formation is 18.4 disintegrations per minute per gram of carbon, and the rate of decay 13.3, so that a non-equilibrium condition exists. This situation telescopes all radiocarbon ages to about 10,000 years or less. In analyzing this equilibrium postulate, Libby, the author of the radiocarbon method, found evidence for this unbalance. However, he discounted the evidence for this unbalance in favor of what he took to be more compelling, albeit hearsay, evidence, that the earth is too old for C₁₄ to be out of balance.”⁵⁴ (See “Carbon 14 Dating” in Chapter 10.)

FACT 2: The laboratory at UCLA, which is under the direction of Dr. Libby, issued this statement: “It has been shown on the basis of these investigations that variations from the assumed initial activity of some of these samples do exist. Recent elaborate studies have now demonstrated conclusively that the initial activity of C₁₄ samples and thus the rate of C₁₄ production have varied with time. Most recently, the work of Suess (1965, *J. Geophys. Res.*, V. 70, p. 5937–5952) has clearly pointed out these variations.”⁵⁵

QUESTION: Can bones be dated directly by the C₁₄ process?

FACT: “We have had no experience with bone as such and believe that it is a very poor prospect for two reasons; the carbon content of a bone is extremely low, being largely in inorganic form in a very porous structure; and it is extremely likely to have suffered alteration.”⁵⁶

QUESTION: Have the radiometric “clocks” been proven accurate in telling the earth’s age?

FACT 1: Recent research on young rocks of known age challenge this assumption. Isotopic ratios (elements resulting from radioactive decay) indicate that even “young” volcanic deposits are at an advanced stage of decay, giving theoretical “ages” of thousands of millions of years. Attempts to check the reliability of radioactive dating by the potassium-argon method has been carried out by the University of

54. Dr. Melvin Cook, “Radiological Dating and Some Pertinent Applications,” *Creation Research Society Quarterly*, Sept. 1968, p. 69.

55. “On the Accuracy of Radiocarbon Dates,” *Geochronicle*, Vol. 2, No. 2, June 1966.

56. Willard F. Libby, *Radiocarbon Dating*. University of Chicago Press, 1955, p. 45.

Hawaii on island volcanic rocks. It was reported that “excess argon caused volcanic rock (formed within the last two hundred years) to have an apparent age of hundreds of millions of years. In the case of previously calculated ages, where the real ages were unknown though presumed to be old, this excess argon was not noticed. But in the case of rocks known to be young, it was very obvious that the ages calculated had no relationship to the real ages.”⁵⁷ (See “True Radiometric Age Versus Speculation” in Chapter 10.)

FACT 2: Research by the Academy of Science in Russia has been carried out on eighteen samples from twelve volcanoes containing radioactive materials in the uranium 238 series. It was found that isotopes⁵⁸ in the chain were in disequilibrium. The ratios between the daughter elements in the uranium 238 series were found to be far greater than can be accounted for through the normal process of decay, indicating that some isotope material must have been present in the mineral bodies at the time of their genesis. Since measuring the ratios between these isotopes is used in the dating of mineral bodies, and it is known that an immeasurable quantity of isotopes did not form by decay from uranium, it is pure speculation to guess at the original amount of isotope material and thereby produce a ratio to get a date of origin. These samples were taken from volcanic flow known to have occurred within the last two hundred years, yet the radiometric “clock” dating gave them an age in the hundreds of millions of years.⁵⁹

FACT 3: Studies in the United States using the uranium decay series on ten recently active volcanoes were expected to give very small ratios due to their young age. Instead, the ratios were extremely large, indicating from 5,000 million to 10,500 million years of age.⁶⁰

57. J. C. Funkhouser, I. L. Barnes, and J. J. Naughton, “The Problems of Dating Volcanic Rocks by the Potassium-Argon Method,” *Bulletin of Volcanology*, Vol. 29, 1966, p. 709.

58. Uranium 238 decays through a series of daughter products called isotopes until it ends up as common lead.

59. Cherdyntsev, Kislitsina, and Zverev, “Isotopic Composition of Uranium and Thorium in Rocks and Products of Active Volcanism,” Geological Institute, Academy of Sciences, U.S.S.R., Earth Science Section, 172: 178.

60. Sidney P. Clementson, “A Critical Examination Of Radioactive Dating of Rock,” *Creation Research Society Quarterly*, Dec. 1970, p. 137.

FACT 4: "In addition to knowing the rate of formation of decay products and the present amount of them, it is also necessary to know the original amount of them before decay started. It is not sufficient to just assume zero amounts of material. In most cases the decay products are just like materials already naturally present in the sample even when no radioactive decay has occurred. In other words, we are back to the problem of knowing the original conditions. In the case of the age of the earth, it is obvious that no scientist made records of the initial condition."⁶¹

The conclusion that can be drawn from these facts applies equally to dating of all mineral-bearing rocks: calculated ages give no indication whatsoever of the ages of the host rocks. These ages have no relationship to the age of the earth, because the various ages computed have varied so widely. Consequently, ratios of parent and daughter elements are merely ratios, and their use as a base for projecting "ages" of the rocks, or of the earth itself, is highly questionable and fraught with many assumptions that cannot be checked.

QUESTION: Can radioactive materials that cause halos in igneous (volcanic) rock discount the theory of the slow evolution of the earth?

FACT: Dr. Robert V. Gentry spent years studying the phenomenon of radioactive halos. Of polonium 214 he wrote, "The half-life of polonium 214 is only 164 microseconds. According to one theory of the planet's origin, the earth cooled down from a hot gaseous mass and gradually solidified over a period of hundreds of millions of years. If this were so, polonium halos could not possibly have formed because all the polonium would have decayed soon after it was synthesized and would have been extinct when the crustal rocks formed. . . . Unless the creation of the radioactivity and rocks were simultaneous there would be no picture—no variant pleochroic halos. Further, by virtue of the very short half-life, the radioactivity and formation of the rocks must be almost instantaneous."⁶²

61. Dr. Donald Chittick, "Dating the Earth and Fossils," Symposium II at George Fox College, Baker Book House, 1970.

62. Dr. Robert V. Gentry, "Cosmology and Earth's Invisible Realm," *Medical Opinion and Review*, Oct. 1967, pp. 65-79.

QUESTION: Do laws of physics and biology harmonize or conflict with evolution?

FACT 1: When the universe came into existence it must have preceded the First Law of Thermodynamics. This is the *foremost law* of all nature, and it states that matter and energy can be neither created nor destroyed—only interchanged. The universe therefore could not come into being on its own out of nothing.

FACT 2: After Creation of the physical universe with its matter, energy, and life forms on the earth, a fully wound-up biophysical world preceded the Second Law of Thermodynamics. This is the *second foremost law* of nature and addresses two actions of energy and matter:

1. The universe's energy is running down, like a watch, causing the sum total of usable energy to constantly decrease.
2. Matter breaks down from complex to simple forms. This is seen in aging, rust, and many forms of deterioration.

QUESTION: Where did the original supply of the universe's energy come from, since energy is a never-ending downhill process? This foremost law of the universe refutes the speculation that the universe brought itself into existence from nothing!

THEREFORE: This postulates a *Special Creation*, which is unexplainable by modern science. *Both* the evolutionists and the creationists believe in a *Special Creation!!*

THIS PRESENTS ONE OF TWO CHOICES:

Life, intelligence, order, and energy buildup came from nothing or inert dead matter. *This IS NOT compatible* with modern science or the concept of God.

Life, intelligence, order, energy buildup, and matter came from that which had Life, Total Power, and Intelligence. *This IS compatible* with modern science and the concept of God.

WHICH IS YOUR CHOICE?

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