

Why has evolution become so widely accepted, and why has the Bible come to be viewed with such hostility? What has changed?

Only a few generations ago laws prevented the teaching of the theory of evolution in some communities and regions in the United States. The Bible was commonly accepted as true and a reliable account of our origins. But now almost the opposite is true. The Bible is banned from classrooms in American schools, and serious discussion of the biblical view of the creation of our universe—and our human origins—is forbidden. At the same time, criticism of the theory of evolution is at times ruthlessly suppressed in academic and scientific circles.

Certainly not all scientists agree that no Creator exists and that we as human beings are the product of random chance. In 1972 the California State Board of Education asked NASA director Wernher von Braun, who has been called the father of the American space program, for his thoughts on the origin of the universe, life and the human race. Here's how he responded:

“For me, the idea of a creation is not conceivable without invoking the necessity of design. One cannot be exposed to the law and order of the universe without concluding that there must be design and purpose behind it all. In the world around us, we can behold the obvious manifestations of an ordered, structured plan or design . . .

“And we are humbled by the powerful forces at work on a galactic scale, and the purposeful orderliness of nature that endows a tiny and ungainly seed with the ability to develop into a beautiful flower. The better we understand the intricacies of the universe and all it harbors, the more reason we have found to marvel at the inherent design upon which it is based . . .

“To be forced to believe only one conclusion—that everything in the universe happened by chance—would violate the very objectivity of science itself. Certainly there are those who argue that the universe evolved out of a random process, but what random process could produce the brain of a man or the system of the human eye?

“Some people say that science has been

unable to prove the existence of a Designer. They admit that many of the miracles in the world around us are hard to understand, and they do not deny that the universe, as mod-

care what happens to our fellowman. We should seek only our personal gain regardless of the cost to others—acting exactly as evolutionary theory says we should.

Could man create a religion with no god? The widespread acceptance of evolution shows that we have done just that. The Bible teaches us that God created man. Evolution teaches us that man created God.

If God created man we have no right to ignore Him. If man created God we can easily ignore Him. What man has made he can do away with. Thus we are free to act as

though God doesn't exist, free to dismiss the Bible, free to determine for ourselves what is right and wrong and how we will choose to live.

Which is the myth, God or evolution? Louis Bounoure, director of France's Strasbourg Zoological Museum and professor of biology at the University of Strasbourg, stated: "Evolution is a fairy tale for grown-ups. This theory has helped nothing in the progress of science. It is useless" (Federer, p. 61).

Professor Bounoure, though right about

evolution, was wrong about one thing. Rather than being *useless*, evolution is quite *useful* if one wants to reject the idea of God.

In this booklet we examine the foundational premises of evolution. We consider the evidence evolutionists cite to support the theory. Perhaps most important, we look at the scientific facts evolutionists *don't* discuss in public—for reasons that will become clear.

You *can* know whether evolution is true. We hope you'll examine the evidence carefully. What you believe *does* matter.

The theory of evolution, long taught in schools and assumed to be true by many in the scientific community, is increasingly questioned by scientists and university professors in various fields.

not been a hallmark among Catholics through much of the 20th century. Asked about the pope's statement, Peter Stravinskis, editor of the 1991 *Catholic Encyclopedia*, said: "It's essentially what Augustine was writing. He tells us that we should not interpret Genesis literally, and that it is poetic and theological language" (*Time*, international edition, Nov. 4, 1996, p. 59).

The Catholic theologian Augustine lived 354-430. The *Encyclopaedia Britannica* describes him as "the dominant personality of the Western Church of his time, generally recognized as the greatest thinker of Christian antiquity." It adds, "He fused the religion of the New Testament with the Platonic tradition of Greek philosophy" (15th edition, 1975, *Micropaedia* Vol. 1, "Augustine of Hippo, Saint," pp. 649-650).

The Testimony of the New Testament

Many passages show us that Christ and the apostles fully accepted the Genesis account of the creation. Jesus talked about "the beginning of the creation which God created" (Mark 13:19; see also Matthew 24:21).

He once asked some who questioned Him: "Have you not read that He who made them [Adam and Eve] at the beginning 'made them male and female?'" (Matthew 19:4; Mark 10:6). Later the resurrected Christ referred to Himself as "the Beginning of the creation" (Revelation 3:14).

Many are surprised to learn that the Bible reveals Christ as the Creator! More than once the apostle Paul explained to early Christians that God had created all things by Jesus Christ (Ephesians 3:9; Colossians 1:16). Hebrews 1:2 tells us that God "has in these last days spoken to us by His Son, . . . through whom also He made the worlds."

Paul also told the Athenians that God made all nations "from one blood" (Acts 17:26); all are descendants of Adam and Eve. Paul believed all that was written in the Law and the Prophets (Acts 24:14), including the creation accounts.

Finally, both the specifics and the tenor of Peter's last letter tell us that he, too, believed in creation (see 2 Peter 3:4-7 in particular).

Little did Augustine realize he was doing his followers a grave disservice by viewing parts of the Bible as allegorical while simultaneously incorporating into his teaching the views of the Greek philosophers. For the next 1,300 years, covering roughly the medieval age, the view of those pagan philosophers became the standard for the Roman church's explanation of the universe.

Furthermore, ecclesiastical leaders adopted the earth-centered view of the universe held by Ptolemy, an Egyptian-born astronomer of the second century. "It was . . . from the work of previous [Greek] astronomers," says the *Encyclopaedia Britannica*, "that Ptolemy evolved his detailed description of an Earth-centered (geocentric) universe, a revolutionary but erroneous idea that governed astronomical thinking for over 1,300 years . . ."

"In essence, it is a synthesis of the results obtained by Greek astronomy . . . On the motions of the Sun, Moon, and planets, Ptolemy again extended the observations and conclusions of Hipparchus—this time to formulate his geocentric theory, which is popularly known as the Ptolemaic system" (*Britannica*, 15th edition, 1975, *Macroaedia* Vol. 15, "Ptolemy," p. 179).

The Bible and the universe

Thus it was not the *biblical* perspective but the *Greek* view of the cosmos—in which everything revolved around a stationary earth—that was to guide man's concept of the universe for many centuries. The Roman Catholic Church made the mistake of tying its concept of the universe to that of earlier pagan philosophers and astronomers, then enforced that erroneous view.

Although the Greeks thought Atlas held up first the heavens and later the earth, and the Hindus believed the earth rested atop four gigantic elephants, the Bible has long revealed the true explanation. We read in Job 26:7 an astonishingly modern scientific concept, that God "hangs the earth on nothing." Science has demonstrated that this "nothing" is the invisible force of gravity that holds the planet in its orbit.

Centuries passed before Nicolas Copernicus calculated that the earth was not the center of the universe. However, he was cautious about challenging the Roman church on this belief. More than a century would elapse before someone would be bold enough and possessed sufficient evidence to clash with the

established religious authorities.

In the 1690s, after observing through a telescope the moons orbiting Jupiter, Italian astronomer Galileo Galilei beheld clear evidence that the earth revolved around the sun and not vice versa. Catholic authorities considered the idea heretical, and Galileo was threatened with death if he did not recant. Finally he did, although legend has it that, as he left the presence of the pope, he muttered under his breath: "But it [the earth] still moves."

"When the Roman church attacked Copernicus and Galileo," says Christian philosopher Francis Schaeffer, "it was not because their teaching actually contained anything contrary to the Bible. The church authorities thought it did, but that was because Aristotelian elements had become part of church orthodoxy, and Galileo's notions clearly conflicted with them. In fact, Galileo defended the compatibility of Copernicus and the Bible, and this was one of the factors which brought about his trial" (*How Shall We Then Live?*, 1976, p. 131).

Ironically, these first battles between scientists and the Bible were over biblical misinterpretations, not what the Bible actually says.

The Bible and scientific advancement

Several centuries later, a more-proper biblical understanding actually furthered scientific advancements and achievements. The English scholar Robert Mer-ton maintains that the values Puritanism promoted in 17th-century England encouraged scientific endeavors. A Christian was to glorify God and serve Him through participating in activities of practical value to his community. He wasn't to withdraw into the contemplative life of monasteries and convents.

Christians were to choose a vocation that best made use of their talents. Reason and education were praised in the context of educating people with practical knowledge, not the highly literary classics of pagan antiquity, that they might better do their life's work. Puritanism also encouraged literacy, because each believer had to be able to read the Bible for himself and not depend on what others said it meant.

Historians note that the invention of the printing press and subsequent broader distribution of the Bible in the 1500s played a large role in the emergence of modern science. "The rise of modern science," says Francis Schaeffer, "did not conflict with what the Bible teaches; indeed, at a crucial

point the Scientific Revolution rested upon what the Bible teaches.

“Both Alfred North Whitehead and J. Robert Oppenheimer have stressed that modern science was born out of the Christian world view . . . As far as I know, neither of the two men were Christians . . . Because the early scientists believed that the world was created by a reasonable God, they were not surprised to discover that people could find out something true about nature and the universe on the basis of reason” (Schaeffer, pp. 132-133).

As this more biblically based science expanded, ecclesiastical leaders had to admit that some long-held positions were wrong. With the esteemed position that the earth was at the center of the universe proven false, the church lost both prestige and credibility to emerging science. As time went on, scientific study grew

increasingly apart from the dominant religion, which was mired in its Greek and medieval thought. This gap has only widened with time.

Evolution’s early roots

Although evolution wasn’t popularized until 1859 with the publication of Charles Darwin’s *Origin of Species*, the roots of the idea go much further back in history.

“The early Greek philosophers,” explains British physicist Alan Hayward, “were probably the first thinkers to toy with the notion of evolution. Along with many other ideas from ancient Greece it reappeared in western Europe in the fifteenth and sixteenth centuries . . . But one great difficulty stood in the way. Nobody . . . could explain convincingly how evolution could have taken place. Each species seemed to be fixed. There

seemed no way in which one species could give rise to another. . .

“Darwin changed all that with his theory that the way evolution worked was by ‘natural selection.’ He proposed that small variations in each generation—the kind of natural variations that enable breeders to produce new varieties of dogs and cows and apples and roses—would eventually add up to very big differences, and thus, over hundreds of millions of years, could account for every species on earth” (*Creation and Evolution: Rethinking the Evidence From Science and the Bible*, 1985, pp. 4-5).

Thus, in the late 19th century, scientists and educators were sidetracked from discovering the truth about the origin and meaning of life when they adopted Darwin’s reasoning. Their widespread acceptance of an alternative explanation

Ancient Near-Eastern Concepts of Creation

Is the Genesis account only an ancient myth, no better than tales originating in other cultures over the millennia? Many people obviously think so. Notice what Richard Dawkins, professor of zoology at Oxford University and professed atheist, has to say about the biblical account:

"Nearly all peoples have developed their own creation myth, and the Genesis story is just the one that happened to have been adopted by one particular tribe of Middle Eastern herders. It has no more special status than the belief of a particular West African tribe that the world was created from the excrement of ants" (Richard Dawkins, *The Blind Watchmaker: Why the Evidence of Evolution Reveals a Universe Without Design*, 1986, p. 316).

But is Professor Dawkins' assumption true? Is the Genesis record a fairy tale little different from those of other ancient cultures?

Some 5,000 years ago, the Sumerians of Mesopotamia left accounts of their creation myths inscribed on cuneiform tablets. The Sumerians conceived of the earth as flat and the sky as a canopy of clouds and stars. They believed earth and sky were created by two gods: An, the male sky god, and Ki, the female earth god.

These two gave birth to a multitude of other gods, each with a particular power and responsibility over a part of the creation or physical phenomena (lightning, trees, mountains, illness, etc.). They lived in a kingly court in heaven, with An, the supreme god, surrounded by four subordinate creator gods. Below them were a council of seven gods and, finally, the 50 remaining minor gods.

All physical occurrences could be interpreted by the priests as the result of the particular mood or whim of one of these gods. They could be placated by offerings and sacrifices. Although these deities were considered immortal, their supposed conduct was anything but divine. They were depicted as often fighting among themselves, full of petty envies and lusts and subject to hunger and even death.

A few centuries later the Babylonians conquered the Sumerians and modified these myths to exalt their own civilization. Now it was the Babylonian god Marduk who was in charge; he formed the heavens and earth by killing a female god,

Tiamat. According to the Babylonian creation account:

"The god Apsu and the goddess Tiamat made other gods. Later Apsu became distressed with these gods and tried to kill them, but instead he was killed by the god Ea. Tiamat sought revenge and tried to kill Ea, but instead she was killed by Ea's son Marduk. Marduk split her body in half, and from one half he made the sky and from the other half he made the earth. Then Marduk,



The Babylonians recorded their version of earth's creation on this ancient clay tablet, now preserved in the British Museum. It records a celebration banquet to honor Marduk's selection as champion of the gods after he defeated the goddess Tiamat, from whose body he made the sky and earth.

with Ea's aid, made mankind from the blood of another god, Kingu" (*Life: How Did It Get Here?*, 1985, p. 35).

Does this kind of bizarre tale bear any resemblance to the biblical account of creation? Not at all. The first civilizations of the Fertile Crescent had similar creation accounts, but the only one free of outrageous myth and with a moral and perfect God is the biblical version.

In contrast to the crude polytheistic struggles found in such ancient myths, the Genesis account is smooth, systematic, rational and—yes—scientific.

Notice astrophysicist Hugh Ross's reaction on first reading the biblical account of creation: "The [Bible's] distinctives struck me immediately. It was simple, direct, and specific. I was amazed with the quantity of historical and scientific references and with the detail in them.

"It took me a whole evening just to investigate the first chapter. Instead of another bizarre creation myth, here was a journal-like record of the earth's initial

conditions—correctly described from the standpoint of astrophysics and geophysics—followed by a summary of the sequence of changes through which Earth came to be inhabited by living things and ultimately by humans.

"The account was simple, elegant, and scientifically accurate. From what I understood to be the stated viewpoint of an observer on Earth's surface, both the order and the description of creation events perfectly matched the established record of nature. I was amazed" (*The Creator and the Cosmos*, 1993, p. 15).

Consider an admission from *The Columbia History of the World*: "Indeed, our best current knowledge, lacking the poetic magic of scripture, seems in a way less believable than the account in the Bible . . ." (John Garraty and Peter Gay, editors, 1972, p. 3).

It is natural to conclude, as nations gradually distanced themselves from the true Creator God and sank into immorality and polytheism, that their understanding of the creation became corrupted and eventually was used to prop up their political, social, philosophical and religious outlooks.

Vernon Blackmore and Andrew Page write: "Today the difference between Genesis and the Babylonian account is evident. The first speaks of one God creating the world and mankind by his own command; the other describes chaos and war among many gods, after which one god, Marduk, fashions humanity from clay and blood. The spiritual depth and dignity of Genesis far surpasses the polytheistic ideas of Babylon. Yet until the complete story had been reconstructed, incautious scholars talked of the Bible account being a copy of that from Babylonia. Certainly, they argued, Genesis should be consigned to the category of legend, and its writing was dated long after Moses to the time Israel was held captive in Babylon.

"Much of nineteenth-century liberalism has now been shown as excessive. The Old Testament is not a poor reflection of more ancient Babylonian or Canaanite tales. There are more differences than similarities between the texts. The opening chapters of Genesis stand unique. Nevertheless, many scholars still use the category of myth in relation to some of the biblical material" (*Evolution: The Great Debate*, 1989, p. 130).

for the existence of man and the creation apart from the account of Genesis soon led to a general distrust of the Bible. This massive shift of thought has had far-reaching consequences. “Darwinism,” says Dr. Hayward, “begins to look more like a huge maze without an exit, where the world has wandered aimlessly for a century and a half” (Hayward, p. 58).

Meanwhile the churches, having centuries earlier incorporated unscientific, unbiblical Greek philosophical concepts into their views, could not adequately explain and defend aspects of their teachings. They, too, were ultimately sidetracked by their mixing of pagan philosophy with the Bible. Both science and religion built their explanations on wrong foundations.

Acceptance of evolution

Some of the reasons for the acceptance of Darwin’s theory involved conditions of the time. The 19th century was an era of social and religious unrest. Science was riding a crest of popularity. Impressive discoveries and inventions appeared constantly.

Darwin himself had an impeccable reputation as a dedicated naturalist, but the length and tediousness of his book hid many of the weaknesses of his theory (he described his own book as “one long argument”). It was in this climate that Darwin’s theory gained acceptance.

At the same time, the Roman church was being affected by its own cumulative mistakes about science as well as the critics’ onslaughts against its teachings and the Bible. The church itself began to accept supposedly scientific explanations over divine ones. A bias against the supernatural slowly crept in.

The momentum grew in the 20th century until many Protestants and Catholics accepted *theistic evolution*. This is the belief that God occasionally intervenes in a largely evolutionary process through such steps as creating the first cell and then permitting the whole process of evolution to take place or by simply waiting for the first man to appear from the gradual chain of life and then providing him with a soul.

“Darwinian evolution to them,” says Dr. Hayward, “is merely the method by which God, keeping discreetly in the background, created every living thing . . . The majority of theistic evolutionists have a somewhat liberal view of the Bible, and often regard the early chapters of Genesis as a collection of Hebrew myths” (Hayward, p. 8).

The implications for the trustworthiness of the Bible are enormous. Is it the inspired and infallible Word of God, or are parts of it merely well-intentioned myths? Are sections of it simply inaccurate and unreliable? Were Jesus Christ and the apostles wrong when they expressed their belief that Adam and Eve were the first man and woman, created directly by God? (Matthew 19:4; 1 Corinthians 15:45).

Was Christ mistaken, and did He mislead others? Is 2 Timothy 3:16 true, that “all Scripture is given by inspiration of God, and is profitable for doctrine [teaching] . . .”? Clearly, the implications for Christian faith and teaching are profound (see “The Testimony of the New Testament,” p. 4).

Perhaps the effects of his theory on Darwin’s own faith can illustrate the damage it can do to religious convictions. Darwin started as a theology student and a staunch respecter of the Bible. But, as he formulated his theories, he lost faith in the Old Testament. Later he could no longer believe in the miracles of the New Testament.

A danger lies in following in Darwin’s footsteps. We should remember the old saying: If you teach a child he is only an animal, don’t complain when he behaves like one. Can we not lay part of the blame for rampant immorality and crime on society’s prevalent values and beliefs—derived to a great extent from evolutionary theory?

Darwinism and morality

If there isn’t a just God to judge the actions of men, isn’t it easier for man to do as he pleases? Sir Julian Huxley admitted why many quickly embraced evolution with such fervor: “I suppose the reason we leaped at *The Origin of Species* was because the idea of God interfered with our sexual mores” (James Kennedy, *Why I Believe*, 1999, p. 49).

He later wrote, “The sense of spiritual relief which comes from rejecting the idea of God as a super-human being is enormous” (*Essays of a Humanist*, 1966, p. 223).

Could this perspective have something to do with the immorality rampant in so many schools and universities where God is banned from the classroom and evolutionary theory is accepted and taught as fact?

Can the Genesis account be reconciled with the idea of an ancient earth? What about evolution? How strong is its case? Let’s carefully weigh the evidence.

The Greek Concept of Creation

The ancient Greeks had no shortage of creation myths, with many elements taken from the Babylonian model. Two poets, Homer and Hesiod, described the Greek religious system, with its national gods in charge, while living in a royal court full of intrigues and lusts.

In his version Hesiod saw the origin of the universe as deriving from the chaos, the vastness, of space that produced the first goddess, Gaea (earth). She created Uranus (heaven), who became her husband, and they produced many lesser gods. The division between heaven and earth occurred when one of their sons, Cronus, in a fit of jealousy attacked his father, Uranus. Zeus, the one who became the chief god, was born from the irate Cronus and his wife, Rhea.

Sadly, the only surviving writings about Christianity from the first centuries after the apostles come mainly from men steeped in Greek thought and philosophy. These were Justin Martyr (110-165), Clement (160-220), Origen (185-254) and Augustine (354-430), all former disciples of the thinking of Plato and Aristotle. In this way Greek philosophy entered the Roman church and formed much of its theology.

“The problem with Gentile Christians,” notes church historian Samuele Bacchiocchi, “was not only their lack of familiarity with Scripture, but also their excessive fascination with their Greek philosophical speculations, which conditioned their understanding of Biblical truths. While Jewish Christians often erred in the direction of legalism, Gentile Christians often erred in the direction of philosophical speculations which sundered Christianity from its historical roots” (*God’s Festivals in Scripture and History*, 1995, pp. 102-103).

In particular, Origen and Augustine began to interpret much of the book of Genesis as allegory. They viewed the Genesis account as filled with symbolic fictional figures representing truth, human conduct or experience. Gradually, this allegorical method became the norm in the Catholic understanding of much of Genesis. These misconceptions were to heavily influence church authorities down through the years.

Can the theory of evolution be proven? After all, it is called the *theory* of evolution in acknowledgment that it is a hypothesis rather than a confirmed scientific fact.

Where can we find evidence supporting evolution as an explanation for the teeming variety of life on earth?

Since evolutionists claim that the transition from one species to a new one takes place in tiny, incremental changes over millions of years, they acknowledge that we cannot observe the process taking place today. Our lifespans simply are too short to directly observe such a change. Instead, they say, we have to look at the past—the fossil record that shows the many life forms that have existed over earth’s history—to find transitions from one species to another.

Darwin’s greatest challenge

When Charles Darwin proposed his theory in the mid-19th century, he was confident that fossil discoveries would provide clear and convincing evidence that his conjectures were correct. His theory predicted that countless transitional forms must have existed, all gradually blending almost imperceptibly from one tiny step to the next, as species progressively evolved to higher, better-adapted forms.

Indeed that would ha

York, is another vigorous supporter of evolution. But he finds himself forced to admit that the fossil record fails to support the traditional evolutionary view.

“No wonder paleontologists shied away from evolution for so long,” he writes. “*It seems never to happen.* Assiduous collecting up cliff faces yields zigzags, minor oscillations, and the very occasional slight accumulation of change—over millions of years, at a rate too slow to really account for all the prodigious change that has occurred in evolutionary history.

“When we do see the introduction of evolutionary novelty, *it usually shows up with a bang*, and often with no firm evidence that the organisms did not evolve elsewhere! *Evolution cannot forever be going on someplace else.* Yet that’s how the fossil record has struck many a forlorn paleontologist looking to learn something about evolution” (*Reinventing Darwin: The Great Debate at the High Table of Evolutionary Theory*, 1995, p. 95, emphasis added).

After an immense worldwide search by geologists and paleontologists, the “missing links” Darwin predicted would be found to bolster his theory are still missing.

Harvard University paleontologist Stephen Jay Gould is perhaps today’s best-known popular writer on evolution. An ardent evolutionist, he collaborated with Professor Eldredge in proposing alternatives to the traditional view of Darwinism. Like Eldredge, he recognizes that the fossil record fundamentally conflicts with Darwin’s idea of gradualism.

“The history of most fossil species,” he writes, “includes two features particularly inconsistent with gradualism [gradual evolution from one species to another]:

“[1] *Stasis.* Most species exhibit no directional [evolutionary] change during their tenure on earth. They appear in the fossil record looking pretty much the same as when they disappear; morphological [anatomical or structural] change is usually limited and directionless.

“[2] *Sudden appearance.* In any local area, a species *does not arise gradually* by the steady transformation of its ancestors: *it appears all at once and ‘fully formed’*” (Gould, “Evolution’s Erratic Pace,” *Natural History*, May 1977, pp. 13-14).

Fossils missing in crucial places

Francis Hitching, member of the Royal Archaeological Institute, the Prehistoric Society and the Society for Physical Research, also sees problems in using the

fossil record to support Darwinism.

“There are about 250,000 different species of fossil plants and animals in the world’s museums,” he writes. “This compares with about 1.5 million species known to be alive on Earth today. Given the known rates of evolutionary turnover, it has been estimated that at least 100 times more fossil species have lived than have been discovered . . . But the curious thing is that there is a consistency about the fossil gaps: *the fossils go missing in all the important places.*

“When you look for links between major groups of animals, *they simply aren’t there*; at least, not in enough numbers to put their status beyond doubt. Either *they don’t exist at all*, or they are *so rare* that endless argument goes on about whether a particular fossil is, or isn’t, or might be, transitional between this group and that.

“. . . There ought to be cabinets full of intermediates—indeed, one would expect the fossils to blend so gently into one another that it would be difficult to tell where the invertebrates ended and the vertebrates began. *But this isn’t the case.* Instead, groups of well-defined, easily classifiable fish jump into the fossil record *seemingly from nowhere*: mysteriously, suddenly, full-formed, and in a most un-Darwinian way. And before them *are maddening, illogical gaps where their ancestors should be*” (*The Neck of the Giraffe: Darwin, Evolution and the New Biology*, 1982, pp. 9-10, emphasis added).

Acknowledging that the fossil record contradicts rather than supports Darwinism, professors Eldredge and Gould have proposed a radically different theory they call “punctuated equilibrium”: that bursts of evolution occurred in small, isolated populations that then became dominant and showed no change over millions and millions of years. This, they say, is the only way to explain the lack of evidence for evolution in the fossil record.

As *Newsweek* explains: “In 1972 Gould and Niles Eldredge collaborated on a paper intended at the time merely to resolve a professional embarrassment for paleontologists: their inability to find the fossils of transitional forms between species, the so-called ‘missing links.’ Darwin, and most of those who followed him, believed that the work of evolution was slow, gradual and continuous and that a complete lineage of ancestors, shading imperceptibly one into the next, could in theory be reconstructed for all living animals . . . *But a century of digging since then has only made their*

absence more glaring . . . It was Eldredge and Gould’s notion to call off the search and accept the evidence of the fossil record on its own terms” (“Enigmas of Evolution,” March 29, 1982, p. 39, emphasis added).

As some observers point out, this is an inherently unprovable theory for which the primary evidence to support it is *lack of evidence* in the fossil record to support transitional forms between species.

Fossil record no longer incomplete

The fossil record has been thoroughly explored and documented. Darwin’s excuse of “extreme imperfection of the geological record” is no longer credible.

How complete is the fossil record? Michael Denton is a medical doctor and biological researcher. He writes that “when estimates are made of the percentage of [now-] living forms found as fossils, the percentage turns out to be surprisingly high, suggesting that the fossil record may not be as bad as is often maintained” (*Evolution: A Theory in Crisis*, 1985,

work. Perhaps the most famous is the supposed evolution of the horse as presented in many biology textbooks. But is it what it is claimed to be?

Notice what Professor Eldredge has to say about this classic “proof” of evolution: “George Gaylord Simpson spent a considerable segment of his career on horse evolution. His overall conclusion: Horse evolution was by no means the simple, linear and straightforward affair it was made out to be . . . Horse evolution did not proceed in one single series, from step A to step B and so forth, culminating in modern, single-toed large horses. Horse evolution, to

Simpson, seemed much more bushy, with lots of species alive at any one time—species that differed quite a bit from one another, and which had variable numbers of toes, size of teeth, and so forth.

“In other words, it is easy, and all too tempting, to survey the fossil history of a group and select examples that seem best to exemplify linear change through time . . . But picking out just those species that exemplify intermediate stages along a trend, while ignoring all other species that don’t seem to fit in as well, is something else again. The picture is distorted. The actual evolutionary pattern isn’t fully

represented” (Niles Eldredge, *The Great Debate*, p. 131).

Eldredge in effect admits that paleontologists picked and chose which species they thought fit best with their theory and ignored the rest. George Gaylord Simpson himself was more blunt: “The uniform continuous transformation of *Hyracotherium* [a fossil species thought to be the ancestor of the horse] into *Equus* [the modern horse], so dear to the hearts of generations of textbook writers, never happened in nature” (*Life of the Past*, 1953, p. 119).

Professor Raup elaborates on the problem paleontologists face in trying

to demonstrate evolution from the fossil record: “. . . We are now about 120 years after Darwin, and knowledge of the fossil record has been greatly expanded. We now have a quarter of a million fossil species but the situation hasn't changed much. The record of evolution is still surprisingly jerky and, ironically, *we have even fewer examples of evolutionary transition than we had in Darwin's time.*

“By this I mean that some of the classic cases of Darwinian change in the fossil record, such as the evolution of the horse in North America, *have had to be discarded or modified* as a result of more detailed information—what appeared to be a nice simple progression when relatively few data were available

The geologic column depicted in many science textbooks and museums supposedly shows which life forms existed at any particular time in the history of our planet. Trilobites, for example, are thought to have lived during the Cambrian period and later became extinct. Dinosaurs walked the earth during what are called the Jurassic and Triassic periods and likewise later became extinct.

According to traditional scientific thinking, such creatures should not be found on earth today because the geologic column shows they fell victim to extinction many millions of years ago. However, several discoveries of “living fossils” have cast doubt on this long-accepted interpretation of the fossil record.

An astounding catch

Perhaps the most stunning—and famous—of these living fossils is the coelacanth. Fossils of this unusual fi

must have been linked to their descendants by long chains of transitional intermediates, also extinct” (Johnson, p. 64).

Evolutionists exercise *selective perception* when looking at the evidence—rather like deciding whether to view half a glass of water as half empty or half full. They

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and skeletons of chitin or lime, they had a far better chance of fossil preservation than the soft-bodied creatures of the previous Precambrian Era” (1997, “Cambrian Period,” emphasis added).

Notice that *complex* marine invertebrates are found in fossil deposits from the Cambrian period. Many don’t realize it, but even paleontologists acknowledge that life does not start with only a few simple creatures. At the lowest levels of the geologic strata, the fossil record consists of complex creatures such as trilobites.

Time magazine said in a long cover story describing fossilized creatures found in Cambrian strata: “In a burst of creativity like nothing before or since, nature appears to have sketched out the blueprints for virtually the whole of the animal kingdom. This explosion of biological diversity is described by scientists as biology’s Big Bang” (Madeleine Nash, “When Life Exploded,” Dec. 4, 1995, p. 68).

Contrary to the assumptions of early evolutionists, life does not start with only a few rudimentary species. Even those who hold to the traditional interpretation of the fossil record admit that it begins with many life forms similar to those we find today. At the same time, they cannot explain such a vast “explosion” of life forms in such a short amount of geologic time, which evolution-

ary theory predicts would take far longer.

Unanswered questions

Supporters of evolution have had to back down from the claims of Darwin and others. “Over the decades, evolutionary theorists beginning with Charles Darwin have tried to argue that the appearance of multicelled animals during the Cambrian merely seemed sudden, and in fact had been preceded by a lengthy period of evolution for which the geological record was missing. But this explanation, while it patched over a hole in an otherwise masterly theory, now seems increasingly unsatisfactory” (*Time*, p. 68).

Again, the facts etched in stone do not match the assumptions and predictions of evolutionary thought. Even if we accept the evolutionists’ interpretation of the fossil record, we see life beginning at the lowest levels with complex creatures, with elaborate organs and other features—but with no known ancestors. Life does not start as predicted by evolution, with simple forms gradually changing into more-complex species.

Although toeing the evolutionary line, the *Time* magazine article admits: “Of course, understanding what made the Cambrian explosion possible doesn’t address the larger question of what made it happen so fast. Here scientists delicately slide across data-thin ice, suggesting scenarios

that are based on intuition rather than solid evidence” (*Time*, p. 73).

Evolutionists have been known to pointedly criticize Christians because they don’t have scientific proof of miracles recorded in the Bible. Yet here is a supremely important geological event with far-reaching implications for the theory of evolution—but one for which scientists have no explanation. Of course, they must assume that life came from nonlife—in violation of the laws of biogenesis. But don’t their fundamental assumptions also amount to faith?

A reasonable explanation is that the life forms found in the Cambrian strata were created by God, who did not work by chance but by design.

The fossil record is the only objective evidence we can examine to see whether evolution is true. But, rather than supporting Darwinism, it shows exceedingly complex organisms in what evolutionists interpret as the oldest fossil strata, no intermediate forms between species, little if any change in species over their entire span in the fossil record, and the sudden appearance of new life forms rather than the gradual change expected by Darwin and his followers.

If we look at the evidence objectively, we realize that the creation story in Genesis 1—describing the sudden appearance of life forms—is a credible explanation.

What have we learned since Charles Darwin’s treatise on evolution, *Origin of Species*, was first published in 1859? Science has advanced greatly since those horse-and-buggy days. In addition to a thorough exploration of the fossil record, a vast amount of other information is readily available.

As we saw when discussing the fossil record, the controversy about evolution is increasing.

Francis Hitching gives a general view of the debate to date: “In April 1882, Charles Darwin died peacefully of a heart attack at his family home in Kent, England. His great theory, the basis of all modern biology teaching, had come to be accepted with a fervor close to reverence . . . Yet as 1982 approached, and with the centenary of his passing, change was in the wind. Feuds

concerning the theory of evolution exploded rancorously in otherwise staid and decorous scientific journals.

“Entrenched positions, for and against, were established in high places, and insults lobbed like mortar bombs from either side. Meanwhile the doctrine of Divine creation, assumed by most scientists to have been relegated long ago to the pulpits of obscure fundamentalist sects, swept back into the classrooms of American schools. Darwinism is under assault on many fronts” (*The Neck of the Giraffe*, 1982, p. 7).

Why the confusion and contention? Simply put, as we saw with the fossil record, the increasing scientific evidence doesn’t fit the Darwinist model—and evolutionists increasingly are finding themselves on the defensive.

How has this come about? It has happened mainly because the primary supposed

proofs of the theory have not held up to further discovery and scrutiny.

What about natural selection?

After the fossil record, the second supposed proof of evolution offered by Darwinists is natural selection, which they hoped biolo

“In this way, Darwin thought, one type of organism could be transformed into another—for instance, he suggested, bears into whales. So that was how we came to have horses and tigers and things—by natural selection” (Tom Bethell, “Darwin’s Mistake,” *The Craft of Prose*, Robert Woodward and Wendell Smith, editors, 1977, p. 309).

Darwin saw natural selection as the major factor driving evolutionary change. But how has this second pillar of evolutionary theory fared since Darwin’s day? In truth, it has been quietly discarded by an increasing number of theorists among the scientific community.

Darwin’s idea that the survival of the fittest would explain how species evolved has been relegated to a redundant, self-evident statement. Geneticist Conrad Waddington of Edinburgh University defines the fundamental problem of advocating natural selection as a proof of Darwinism: “Natural selection, . . . turns out on closer inspection to be a tautology, a statement of an inevitable although previously unrecognized relation. It states that the fittest individuals in a population . . . will leave most offspring” (Bethell, p. 310).

In other words, what are the fittest? Why, those that survive, of course. And what survives? Why, naturally, the fittest. The problem is that circular reasoning doesn’t point to any independent criteria that can evaluate whether the theory is true.

Selection doesn’t change species

Darwin cited an example of the way natural selection was supposed to work: A wolf that had inherited the ability to run especially fast was better equipped to survive. His advantage in outrunning others in the pack when food was scarce meant he could eat better and thus survive longer.

Yet the very changes that enabled the wolf to run faster could easily become a hindrance if other modifications of the body did not accompany the increased speed. For example, the additional exertion required to run faster would naturally place an added strain on the animal’s heart, and eventually it could drop from a heart attack. The survival of the fittest would require that any biological or anatomical alterations would have to be in harmony and synchronized with other bodily modifications, or the changes would be of no benefit.

Natural selection, scientists have found, in reality deals only with the *number* of species, not the *change* of the species. It has to do with the *survival* and not the *arrival* of

the species. Natural selection only preserves existing genetic information (DNA); it doesn’t create genetic material that would allow an animal to sprout a new organ, limb or some other anatomical feature.

“Natural selection,” said professor Waddington, “is that some things leave more offspring than others; and you ask, which leave more offspring than others? And it is those that leave more offspring; and there is nothing more to it than that. The whole guts of evolution—which is, how do you come to have horses and tigers and things—is outside the mathematical theory [of neo-Darwinism]” (*Wistar Symposium*, Moorehead and Kaplan, 1967, p. 14).

Tom Bethell gets to the heart of the problem with natural selection as the foundation of evolution: “This was no good at all. As T.H. Morgan [1933 Nobel Prize winner in medicine for his experiments with the *Drosophila* fruit fly] had remarked, with great clarity: ‘Selection, then, has not produced anything new, but only more of certain kinds of individuals. Evolution, however, means *producing new things, not more of what already exists*’” (Bethell, pp. 311-312, emphasis added).

Bethell concludes: “Darwin’s theory, I believe, is on the verge of collapse. In his famous book, [*Origin of Species*], Darwin made a mistake sufficiently serious to undermine his theory. And that mistake has only recently been recognized as such . . . I have not been surprised to read . . . that in some of the latest evolutionary theories ‘natural selection plays no role at all.’ Darwin, I suggest, is in the process of being discarded, but perhaps in deference to the venerable old gentleman, . . . it is being done as discreetly and gently as possible, with a minimum of publicity” (Bethell, pp. 308, 313-314).

Sadly, the critical examination of natural selection has been undertaken so discreetly that most people are unaware of it—so the pervasive deception that began more than 140 years ago continues.

A look at random mutation

If natural selection is not the answer, what about the third supposed proof—random mutation—as a cornerstone of evolution?

Curiously enough, Darwin himself was one of the first to discount beneficial effects from rare changes he noted in species. He did not even include them in his theory. “He did not consider them important,” says Maurice Caullery in his book *Genetics and Heredity*, “because *they nearly always rep-*

resented an obvious disadvantage from the point of view of the struggle for existence; consequently they would most likely be rapidly eliminated in the wild state by the operation of natural selection” (1964, p. 10, emphasis added).

In Darwin’s lifetime the principles of genetics were not clearly understood. Gregor Mendel had published his findings on genetic principles in 1866, but his work was overlooked at the time. Later, at the beginning of the 20th century, Hugo De Vries rediscovered these principles, which evolutionists quickly seized on to support evolution. Sir Julian Huxley, one of the principal spokesmen for evolutionary theory in the 20th century, commented on the unpredictability of mutations: “Mutation . . . provides the raw material of evolution; it is a random affair and takes place in all directions” (*Evolution in Action*, 1953, p. 38).

So, “shortly after the turn of the [19th to the 20th] century, Darwin’s theory suddenly seemed plausible again,” writes Hitching. “It was found that once in a while, absolutely at random (about once in ten million times during cell division, we now know) the genes make a copying mistake. These mistakes are known as mutations, and are mostly harmful. They lead to a *weakened plant, or a sick or deformed creature*. They do not persist within the species, because they are eliminated by natural selection . . .

“However, followers of Darwin have come to believe that it is the occasional beneficial mutation, rarely though it happens, which is what counts in evolution. They say these favorable mutations, together with sexual mixing, are sufficient to explain how the whole bewildering variety of life on Earth today originated from a common genetic source” (Hitching, p. 49, emphasis added).

Mutations: liability, not benefit

What has almost a century of research discovered? That mutations are *pathological mistakes* and not helpful changes in the genetic code.

C.P. Martin of McGill University in Montreal wrote, “Mutation is a pathological process which has had little or nothing to do with evolution” (“A Non-Geneticist Looks at Evolution,” *American Scientist*, January 1953, p. 100). Professor Martin’s investigations revealed mutations are *overwhelmingly negative* and never creative. He observed that an apparently beneficial mutation was likely only a correction of a previously deleterious one, similar to

punching a man with a dislocated shoulder and inadvertently putting it back into place.

Science writer Milton explains the problem: “The results of such copying errors are tragically familiar. In body cells, faulty replication shows itself as cancer. Sunlight’s mutagenic [mutation-inducing] power causes skin cancer; the cigarette’s mutagenic power causes lung cancer. In sexual cells, faulty reproduction of whole chromosome number 21 results in a child with Down’s syndrome” (Richard Milton, *Shattering the Myths of Darwinism*, 1997, p. 156). Yet evolutionists would have us believe that such genetic mistakes are not only not harmful to the afflicted creature but are helpful in the long run.

Phillip Johnson observes: “To suppose that such a random event could reconstruct even a single complex organ like a liver or kidney is about as reasonable as to suppose that an improved watch can be designed by throwing an old one against a wall” (*Darwin on Trial*, p. 37).

We can be thankful that mutations are extremely rare. An average of one mistake per 10 million correct copies occurs in the genetic code. Whoever or whatever types 10 million letters with only one mistake would easily be the world’s best typist and probably would not be human. Yet this is the astounding accuracy of our supposedly blind genetic code when it replicates itself.

If, however, these copying errors were to

accumulate, a species, instead of improving, would eventually degenerate and perish. But geneticists have discovered a self-correcting system.

“The genetic code in each living thing has its own built-in limitations,” says Hitching. “It seems designed to stop a plant or creature stepping too far away from the average . . . Every series of breeding experiments that has ever taken place has established a finite limit to breeding possibilities. Genes are a strong influence for conservatism, and allow only modest change. Left to their own devices, artificially bred species usually die out (because they are sterile or less robust) or quickly revert to the norm” (Hitching, pp. 54-55).

Some scientists reluctantly concede that mutations do not explain Darwin's proposed transition from one species to the next. Writing about zoologist Pierre-Paul Grassé, Hayward says: "In 1973 he published a major book on evolution . . . First and foremost, the book aims to expose Darwinism as a theory that does not work, because it clashes with so many experimental findings.

"As Grassé says in his introduction: 'Today our duty is to destroy the myth of evolution . . . Some people, owing to their sectarianism, purposely overlook reality and refuse to acknowledge the inadequacies and the falsity of their beliefs' . . .

"Take mutation first. Grassé has studied this extensively, both inside his laboratory and in nature. In all sorts of living things, from bacteria to plants and animals, he has observed that mutations do not take succeeding generations further and further from their starting point. Instead, the changes are like the flight of a butterfly in a green house, which travels for miles without moving more than a few feet from its starting point. There are invisible but firmly fixed boundaries that mutations can never cross . . . He insists that mutations are only trivial changes; they are merely the result of slightly altered genes, whereas 'creative evolution . . . demands the genesis of new ones'" (Hayward, p. 25).

Embarrassingly for evolutionists, mutation is also not the answer. If anything, the self-correcting system to eliminate mutations shows that a great intelligence was at

work when the overall genetic system was designed so that random mutations would not destroy the beneficial genes. Ironically, mutation shows the opposite of what evolutionism teaches: In real life random mutation is the villain and not the hero.

This takes us to one last point on mutations: the inability of evolution to explain the appearance of simple life and intricate organs.

The wondrous cell

Cells are marvelous and incredibly complicated living things. They are self-sufficient and function like miniature chemical factories. The closer we look at cells, the more we realize their incredible complexity.

For example, the cell wall is a wonder in itself. If it were too porous, harmful solutions would enter and cause the cell to burst. On the other hand, if the wall were too impervious, no nourishment could come in or waste products go out, and the cell would quickly die.

Biochemist Behe, the associate professor of biochemistry at Lehigh University, summarizes one of the fundamental flaws of evolution as an explanation for any form of life. "Darwin's theory encounters its greatest difficulties when it comes to explaining the development of the cell. Many cellular systems are what I term 'irreducibly complex.' That means the system needs several components before it can work properly.

"An everyday example of irreducible complexity is a mousetrap, built of several

pieces (platform, hammer, spring and so on). Such a system probably cannot be put together in a Darwinian manner, gradually improving its function. You can't catch a mouse with just the platform and then catch a few more by adding the spring. All the pieces have to be in place before you catch any mice."

Michael Behe's point is that a cell missing a tenth of its parts doesn't function only one tenth less as well as a complete cell; *it doesn't function at all*. He concludes: "The bottom line is that the cell—the very basis of life—is staggeringly complex. But doesn't science already have answers, or partial answers, for how these systems originated? No" ("Darwin Under the Microscope," *New York Times*, Oct. 29, 1996, p. A25).

Miniature technological marvel

Michael Denton, the microbiologist and senior research fellow at the University of Otago in New Zealand, contrasts how the cell was viewed in Darwin's day with what today's researchers can see. In Darwin's time the cell could be viewed at best at a magnification of several hundred times. Using the best technology of their day, when scientists viewed the cell they saw "a relatively disappointing spectacle appearing only as an ever-changing and apparently disordered pattern of blobs and particles which, under the influence of unseen turbulent forces, [were] continually tossed haphazardly in all directions" (*Evolution: A Theory in Crisis*, 1985, p. 328).

The years since then have brought

Darwinism Not the Same as Evolution

A word of caution on the use of the term *evolution*: It can mean different things to different people. The dictionary first defines *evolution* as a process of change from a lower to a higher state and, second, as the theory Darwin advocated. But they are not the same. Evolution literally means simply the successive appearances of perfectly formed life without regard to how it got there. It does not have to refer to Darwinism, which is the doctrine that gradual change led to one species becoming another through the process of natural selection.

A species is generally defined as a living thing that can reproduce only after its own kind. So, although most scientists

mean Darwinism when they use the term, the two definitions of the term are not synonymous and should be carefully defined by the context.

"Why is it," asks physicist Alan Hayward, "that the terms 'Darwinism' and 'evolution' are so often used (wrongly) as if they meant the same thing? Simply because it was Darwin who put the old idea of evolution on its feet. Before Darwin, evolution was regarded by most people as a wild, unbelievable notion. After Darwin, evolution seemed such a reasonable idea that the general public soon took it for granted.

"Many people since Darwin's day have tried to find an alternative explanation of evolution, but none has

succeeded. Just as when he first proposed it, Darwin's appears the only conceivable method of evolution. It still seems that Darwinism and evolution must stand or fall together" (*Creation and Evolution*, 1985, p. 5).

This is a reason many Darwinists are so adamant about their theory. They know the implications if they fail: The alternative explanation of life on earth is a Creator God. Professor L.T. More has candidly admitted in his book *The Dogma of Evolution*: "Our faith in the doctrine of Evolution depends upon our reluctance to accept the antagonistic doctrine of special creation [creation by God]" (quoted by Francis Hitching, *The Neck of the Giraffe*, p. 109).

Blood Clotting: A Biological Miracle

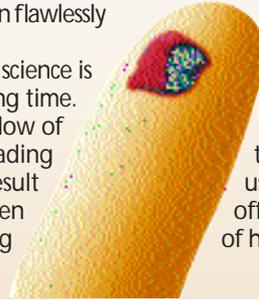
One relatively simple process necessary for animal life is the ability for blood to clot to seal a wound and prevent an injured animal (or person) from bleeding to death. Yet the only way this intricate system works is when many complicated chemical substances interact. If only one ingredient is missing or doesn't function in the right way—as in the genetic blood disorder hemophilia—the process fails, and the victim bleeds to death.

How can complex substances appear at just the right time in the right proportions and mix properly to clot blood and prevent death? Either they function flawlessly or clotting doesn't work at all.

At the same time, medical science is aware of clotting at the wrong time. Blood clots that cut off the flow of oxygen to the brain are a leading cause of strokes and often result in paralysis or death. When blood clots, either everything

works perfectly or the likely outcome is death.

For evolution to have led to this astounding phenomenon, multiple mutations of just the right kind had to converge simultaneously or the mutations would be useless. Evolutionists can offer no realistic explanation of how this is possible.



astounding technological advancements. Now researchers can peer into the tiniest parts of cells. Do they still see only formless blobs, or do they witness something far more astounding?

“To grasp the reality of life as it has been revealed by molecular biology,” writes Dr. Denton, “we must magnify a cell a thousand million times until it is twenty kilometres in diameter and resembles a giant airship large enough to cover a great city like London or New York. What we would then see would be an object of unparalleled complexity and adaptive design.

“On the surface of the cell we would see millions of openings, like the port holes of a vast space ship, opening and closing to allow a continual stream of materials in and out. If we were to enter one of these openings we would find ourselves in a world of supreme technology and bewildering complexity. We would see endless highly organized corridors and conduits branching in every direction away from the perimeter of the cell, some leading to the central memory bank in the nucleus and others to assembly plants and processing units.

“The nucleus itself would be a vast spherical chamber more than a kilometre in diameter, resembling a geodesic dome inside of which we would see, all neatly stacked together in ordered arrays, the miles of coiled chains of the DNA molecules . . .

“We would wonder at the level of control implicit in the movement of so many objects down so many seemingly endless conduits, all in perfect unison. We would see all around us, in every direction we looked, all sorts of robot-like machines. We would notice that the simplest of the functional components of the cell, the pro-

tein molecules, were astonishingly, complex pieces of molecular machinery, each one consisting of about three thousand atoms arranged in highly organized 3-D spatial conformation.

“We would wonder even more as we watched the strangely purposeful activities of these weird molecular machines, particularly when we realized that, despite all our accumulated knowledge of physics and chemistry, the task of designing one such molecular machine—that is one single functional protein molecule—would be beyond our capacity . . . Yet the life of the cell depends on the integrated activities of thousands, certainly tens, and probably hundreds of thousands of different protein molecules” (Denton, pp. 328-329).

This is a microbiologist's description of one cell. The human body contains about 10 trillion (10,000,000,000,000) brain, nerve, muscle and other types of cells.

Did this come about by chance?

Yet, as complex as cells are, the smallest living things are even far more intricate. Sir James Gray, a Cambridge University professor of zoology, states: “Bacteria [are] far more complex than any inanimate system known to man. There is not a laboratory in the world which can compete with the biochemical activity of the smallest living organism” (Marshall and Sandra Hall, *The Truth: God or Evolution?*, 1974, p. 89).

How complex are the tiniest living things? Even the simplest cells must possess a staggering amount of genetic information to function. For instance, the bacterium *R. coli* is one of the tiniest unicellular creatures in nature. Scientists calculate it has some 2,000 genes, each with around

1,000 enzymes (organic catalysts, chemicals that speed up other chemical reactions). An enzyme is made up of a billion nucleotides, each of which amounts to a letter in the chemical alphabet, comparable to a byte in computer language. These enzymes instruct the organism how to function and reproduce. The DNA information in just this single tiny cell is “the approximate equivalent of 100 million pages of the *Encyclopaedia Britannica*” (John Whitcomb, *The Early Earth*, 1972, p. 79).

What are the odds that the enzymes needed to produce the simplest living creature—with each enzyme performing a specific chemical function—could come together by chance? Astrophysicists Sir Fred Hoyle and Chandra Wickramasinghe calculated the odds at one chance in $10^{40,000}$ (that is, 10 to the 40,000th power: mathematical shorthand for a 10 followed by 40,000 zeros, a number long enough to fill about seven pages of this publication).

Note that a probability of less than 1 in 10^{50} is considered by mathematicians to be a complete impossibility (Hayward, pp. 35-37). By comparison, Sir Arthur Eddington, another mathematician, estimates there are no more than 10^{80} atoms in the universe! (Hitching, p. 70).

As long as evolutionists keep their conceptions as vague abstractions, they can sound plausible. But, when rigorous mathematics are applied to their generalities, and their assertions are specifically quantified, the underpinnings of Darwinian evolution are exposed as so implausible and unrealistic as to be impossible.

Scientists' revealing reaction

Molecular biochemist Behe comments

Looking for proof of evolution? Biology textbooks frequently cite two examples to show that Darwinian evolution can take place in the real world.

The first commonly offered example involves a species of moths in 19th-century England. The species had two varieties, one light- and the other dark-colored. For years the lighter variety predominated, since its coloration more closely matched the bark of trees on which it rested.

However, as soot from many factories gradually darkened the tree bark, the lighter moths stood out against the now-darkened tree trunks. Birds could see the light moths better and soon devoured most. Before long the darker moths, being better camouflaged against the darker bark, became the more common variety. "In fact this is the first direct evidence actually obtained," says a biology textbook, "to support Darwin's theory that natural selection occurs" (*Contemporary Biology*, 1973, p. 567). Convincing evidence—or is it?

This actually might have been a case of Darwinian natural selection changing the species to confer a survival advantage—if the light moths had turned into dark ones. But no such thing happened. In fact, both types were already in existence. The lighter moths didn't evolve into darker moths. They were eaten. The proportion of dark moths increased while the light moths decreased.

As a science publication admitted: "Students should understand that this is not an example of evolutionary change from light-colored to dark-colored moths, because both kinds were already in the population" (*Science Framework*, 1990, p. 103).

So nothing new came into existence. What changed was not the moths themselves, simply the proportion of the types of moths. It is ironic that now, with stricter regulation of industrial pollution, the light-moth population has made a dramatic comeback. Yet this supposed proof of evolution at work is still included in many biology textbooks.

The second commonly cited example deals with finches found in the Galápagos Islands. No less an authority than Darwin himself was the first to offer them as an example of evolution in action.

Darwin measured the beak sizes of the finches and noticed a slight difference of the birds' beaks from one island to the next. He wrote: "Seeing this gradation

and diversity of structure in one small, intimately related group of birds, one might really fancy that from an original paucity of birds in this archipelago, one species had been taken and modified for different ends" (from Darwin's *The Voyage of the Beagle*, quoted in *Contemporary Biology*, 1973, p. 560).

This was taken as a living proof of "evolution in action," as Julian Huxley called it.

But was it? In reality, nothing new has been created in the varying beak sizes of the finches. However, the finches' beak

size and shape varied somewhat according to environmental conditions and a division of the gene pool through geographic distancing.

For instance, in 1977 a major drought occurred in Daphne, one of the Galápagos Islands. While many finches died, researchers noticed the next generation, offspring of the survivors, had beaks 4 to 5 percent larger. Their stronger-beaked parents had been able to open the last remaining tough seeds that remained in the island. The bigger-beaked survivors produced a generation of bigger-beaked offspring that inherited their parents' characteristics.

Then, in 1983, torrential rains caused flooding in the same island. Now there was an abundance of smaller seeds, and over time scientists found the

on the curious academic and scientific reaction to discoveries about the intricacy of the cell: “Over the past four decades modern biochemistry has uncovered the secrets of the cell. The progress has been hard won. It has required tens of thousands of people to dedicate the better parts of their lives to the tedious work of the laboratory . . .

“The results of these cumulative efforts to investigate the cell—to investigate life at the molecular level—is a loud, clear, piercing cry of ‘*design!*’ The result is so unambiguous and so significant that it must be ranked as one of the greatest achievements in the history of science. The discovery rivals those of Newton and Einstein, Lavoisier and Schrödinger, Pasteur, and Darwin. The observation of the intelligent design of life is as momentous as the

observation that the earth goes around the sun or that disease is caused by bacteria or that radiation is emitted in quanta.

“The magnitude of the victory, gained at such great cost through sustained effort over the course of decades, would be expected to send champagne corks flying in labs around the world. This triumph of science should evoke cries of ‘Eureka!’ from ten thousand throats, should occasion much hand-slapping and high-fiving, and perhaps even be an excuse to take the day off.

“But no bottles have been uncorked, no hands slapped. Instead a curious, embarrassed silence surrounds the stark complexity of the cell. When the subject comes up in public, feet start to shuffle, and breathing gets a bit labored. In private people are a bit more relaxed; many explicitly admit the

obvious but then stare at the ground, shake their heads, and let it go at that.

“Why does the scientific community not greedily embrace its startling discovery? Why is the observation of design handled with intellectual gloves? The dilemma is that while one side of the elephant is labeled intelligent design, the other side might be labeled God” (Behe, pp. 232-233, original emphasis).

These discoveries reveal that the simplest living cell is so intricate and complex in its design that even the possibility of its coming into existence accidentally is unthinkable. It is clear evolutionists don’t have a rational answer to how the first cells were formed. This is just one of their many problems in trying to explain a wondrous creation that they argue had to come together by chance.

When Darwin proposed his famous theory back in 1859, he was aware that one of the glaring weaknesses of his speculations was how to explain complex features in animals by small and gradual evolutionary steps. He admitted, “If it could be demonstrated that any complex organ existed, which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down” (*Origin of Species*, p. 149).

Close to 150 years later, research has provided numerous examples in nature in which complex organs in animals could not have developed by small, successive steps. From molecular science on up, many complex systems had to appear simultaneously, with all their components intact, or they would not function, thus offering no survival advantage.

Molecular biochemist Behe explains: “It was once expected that the basis of life would be exceedingly simple. That expectation has been smashed. Vision, motion, and other biological functions have proven to be no less sophisticated than television cameras and automobiles. Science has made enormous progress in understanding how the chemistry of life

works, but the elegance and complexity of biological systems at the molecular level have paralyzed science’s attempt to explain their origins” (*Darwin’s Black Box*, 1998, p. x).

The bombardier beetle’s chemical weapon

One example of this kind of biological complexity is the bombardier beetle’s defense system. It has so many essential parts and chemicals that, if any are missing, the whole system will not work. Moreover, if everything did not work just right, the deadly chemical mixture inside the beetle would prove fatal rather than favorable.

The tiny beetle, less than an inch long, appears as a tasty morsel for many types of animals. But, as they near the beetle to gobble it up, they suddenly find themselves sprayed with a scalding and noxious solution that forces them to beat a fast retreat. How can this unassuming insect produce such a complex and effective defense system?

T

exploded beetles. The problem of evolutionary novelties is quite widely accepted among biologists . . . In every case, the difficulty is compounded by the lack of fossil evidence. The first time that the plant, creature, or organ appears, it is in its finished state, so to speak” (*The Neck of the Giraffe*, 1982, p. 68).

Nevertheless, evolutionist Richard Dawkins tries to dismiss the complex features of the bombardier beetle by simply saying: “As for the evolutionary precursors of the system, both hydrogen peroxide and various kinds of quinones are used for

other purposes in body chemistry. The bombardier beetle’s ancestors simply pressed into different service chemicals that already happened to be around. That’s often how evolution works” (*The Blind Watchmaker*, 1986, p. 87).

This is not a convincing explanation at all for Dr. Behe, who has studied this beetle’s components down to their molecular level. “Dawkins’ explanation for the evolution of the system,” he says, “rests on the fact that the system’s elements ‘happened to be around’ . . . But Dawkins has not explained how hydrogen peroxide and

quinones came to be secreted together at very high concentration into one compartment that is connected . . . to a second compartment that contains enzymes necessary for the rapid reaction of the chemicals” (Behe, p. 34).

Now that the whole defense system of the beetle has been thoroughly studied, even if the chemicals “happened to be around,” this elaborate chemical cannon would not work without everything from the molecular level up working together and at exactly the right time. Dawkins’ argument is as absurd as saying that if

Cooperation or Competition: Symbiosis vs. Evolution

According to the theory of evolution, all animal life on earth has evolved from a common ancestor. This process has supposedly occurred over an immense time and followed a step-by-step sequence from primitive to advanced forms of life. This would mean plant life first appeared and developed, followed much later by the appearance of animal life.

This idea is contradicted by the fossil record, which shows complex plant and animal life first appearing together in the geologic column during the Cambrian era.

Another obstacle to this theory is the interdependent relationships between living things, called *symbiosis*, in which completely different forms of life depend on each other to exist.

Darwin’s theory of biological change was based on competition, or survival of the fittest, among the individuals making up a species. He admitted: “If it could be proved that any part of the structure of any one species had been formed for the exclusive good of another species, it would annihilate my theory, for such could not have been produced through natural selection” (Darwin, p. 164).

Symbiotic relationships pose such a challenge to Darwin’s theory, since they have animals and plants of different species cooperating for the benefit of both. For example, the dodo bird ate the seeds and leaves of a plant called *calvaria major*. The bird benefited from having the plant as a food source, but the plant benefited from the bird’s gizzard scratching its seeds as they passed through its digestive system. When the bird became extinct, the plant nearly disappeared as well, because only if

its seeds are scratched can they germinate and then grow into a mature plant.

This type of relationship is found in plants and animals. Evolutionists call it coadaptation, but they have yet to come up with a plausible explanation of how this relationship could have evolved in stages.

How can plants that need certain animals to survive have existed before those animals appeared in the first place? And

So which came first, the alga or the fungus? Since neither could exist without the other, according to evolution for both to survive they had to evolve independently of each other, yet appear at exactly the same time and with precisely the right functions.

How could two completely different species evolve separately from distinct ancestors, yet depend on each other to exist? Frankly, the idea that this relationship evolved stretches the imagination beyond the breaking point.

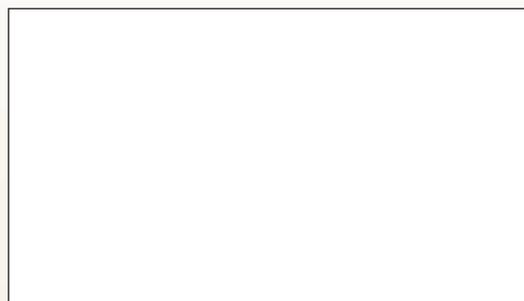
Symbiosis among animals and plants

Another remarkable form of symbiosis is the relationship between bees and plants.

While collecting the precious nectar that provides their hives with food, bees pollinate dozens of species of flowers and agricultural crops. Without this vital pollination, orchards could produce little if any fruit, and fruit trees would not survive for long. How can these plants exist without first being pollinated by bees? On the other hand, how could bees exist without first being provided with the necessary nectar as food? Clearly, both life forms depend on each other for their existence.

In addition, the bee has to carry out pollination in a precisely specific way for the process to work. If the bee visited other species of flowers at random, pollination could not occur, since the pollen of one species of flower does not fertilize another species. Somehow the bee knows to visit only one plant species at a time and at the right season.

Everything in this symbiotic relationship has to be timed exactly right for it to



Evolution cannot explain the remarkable symbiotic relationships between species. Here a whale shark patiently waits while yellow-and-black pilot fish swim in and out of its mouth—cleaning its teeth!

how do animals that need other animals to survive arrive without the other creature already being there?

Symbiosis among lower forms of life

An example of beneficial symbiosis (called mutualism) is between algae and the fungus of lichens. While fungi provide vital protection and moisture to algae, the algae nourish the fungi with photosynthetic nutrients that keep them alive. As a biology textbook puts it: “Neither population could exist without the other, and hence the size of each is determined by that of the other” (Mary Clark, *Contemporary Biology*, 1973, p. 519).

work—and we can be thankful it does. We can enjoy delicious fruits thanks largely to the untiring work of these tiny creatures that unknowingly carry out exactly the right type of pollination that enables many fruits to develop.

One of the most amazing examples of symbiosis is the relationship between the yucca plant and the yucca moth. Each is dependent on the other for its survival.

The yucca plant is physically incapable of pollinating itself to grow more seeds and perpetuate. The yucca moth (*Pronuba*) pollinates the yucca plant while laying its eggs inside the plant.

This is a three-step process. First the moth lands on the stamens (the male part of a flower, which produces pollen) of one of the yucca's flowers. It then makes a sticky ball of pollen that it carries underneath its neck by a special appendage unique to this moth species.

Second, the moth flies to another yucca flower, lands on the pistil (the female part, which grows the fruit and seed) and inserts one of its eggs inside the base of the pistil, the flower's ovary.

Third, the moth climbs the pistil and carefully places pollen from its ball inside the stigma's tube at its top, thus pollinating this part of the flower. The moth repeats the first and second steps of the process for one flower until each ovule has one moth egg in it and each stigma has had pollen put into it.

After hatching, the moth larvae feed on the seeds of the yucca. Remarkably, the moth carefully calibrates the number of its larvae growing inside each flower so the larvae will not consume all the seeds of the yucca—because if they ate all the seeds the yucca plants would stop reproducing, thus eventually dooming the yucca moths as well!

By pollinating the plant, the moth develops food (yucca seeds) for its larvae

while ensuring the plant can continue its own kind as well.

But that's not all. The life cycle of the yucca moth is timed so the adult moths emerge in early summer—exactly when the yucca plants are in flower.

How could such a process as the yucca moth-plant symbiotic relationship have developed by gradual steps in an evolutionary process that proceeds by blind chance? What conceivable sequence of minor changes over thousands or millions of years could have possibly produced a perfect, mutually beneficial arrangement between plant and animal species?

Darwinism offers no answers. It is obvious that this remarkable relationship appeared abruptly or it never could have developed at all.

Symbiosis among animals

All animal life is equipped with some sort of survival instinct. Each knows what kind of food it needs and a means to avoid or defend itself against any predators. Yet, because of symbiotic relationships, some creatures allow other species, which normally would serve as a meal, to carry out cleaning and hygiene tasks without threat or harm. Scientists call this phenomenon "cleaning symbiosis."

It is common for large fish such as sharks, after consuming smaller fish, to have food remains and parasites imbedded around their teeth. Eventually these particles can produce disease or a dangerous build-up of matter that can hinder eating. But certain types of small fish exist that are designed to function as biological toothbrushes and can safely clean the teeth of the larger predators.

The cleaning fish fearlessly swim inside the open mouth of the larger fish and carefully eat the debris and parasites from the teeth. How can a predator fish restrain his instincts of getting a free meal by just

closing his mouth and chewing, or avoid lashing out because of the irritating cleaning process? These actions go directly against the self-preservation instincts of both animals, yet they methodically carry out this sanitizing procedure. Some species even set up the equivalent of cleaning stations where the larger fish patiently wait for their turn while others ahead of them have their mouths cleaned.

A feathered crocodile cleaner

Such cleaning symbiosis is also found among a species of bird and a reptile. In Egypt the Egyptian plover hops right into the open mouth of the Nile crocodile to remove parasites. After the job is done, whether the crocodile is hungry or not the bird always leaves unscathed.

How could such diverse animals, which normal

is that they are able to reach their distant destiny even on their first trip—without any experience!

For instance, the white-throated warbler migrates every year from Germany to Africa. Remarkably, when the adult birds migrate, they leave their offspring behind. Several weeks later, when the young birds are strong enough, they instinctively fly across thousands of miles of unknown land and sea to arrive at the same spot where their parents are waiting! How can these inexperienced birds navigate with such accuracy across thousands of miles and arrive safely

to be reunited with their parents?

In North America the golden plover circumnavigates around most of the northern and southern hemispheres in its migrations. After nesting in Canada and Alaska, plovers begin their trip from the northeastern tip of Canada and fly across the ocean down to Brazil and Argentina, a trip of more than 2,400 miles. When the season is over they travel back north, taking a different route through South and Central America, then up the Mississippi basin all the way to their nesting grounds. They do this flawlessly y

(The Collapse of Evolution, 1998, p. 34).

The salmon's amazing cycle

Some species of salmon exhibit amazingly complex migrations. Hatching from eggs in streams, they spend the first few years of life in freshwater lakes and rivers. After growing to several inches they swim downstream to the ocean, where they adapt to a completely different chemical environment—saltwater—and spend the next few years.

In the process they often migrate for thousands of miles as they feed and grow.

Eventually, toward the end of their lives, they leave the ocean environment and swim upriver and upstream against the current until they reach the very stretch of stream where they were hatched years earlier. There they spawn and die, with their decaying bodies providing nutrients for the newly laid eggs. The eggs then hatch to start a new generation, repeating the amazing cycle.

These many adaptations go against the supposed “numerous, successive, slight modifications” of evolutionary theory as well as plain common sense. If a species is

well adapted to live in freshwater, why undergo the physiological changes necessary to live in saltwater? And why the enormous and exhausting trip back to their original birthplace only to face certain death?

How do these species, after traveling up to several thousand miles, manage to find the very streams in which they were first spawned several years earlier? No plausible evolutionary explanation has been offered.

The decoy fish

In Hawaiian waters swims the astounding-

The Search for Alternatives to a Creator

By now you've probably realized that evolution as an explanation for the teeming varieties of life on earth—not to mention your existence as a thinking, rational human being—simply doesn't add up. Furthermore, we've only scratched the surface (see "The Case Against Evolution," on page 10, for suggestions on books that examine the subject in far greater detail).

So why, then, do so many people cling so tightly to a belief with so many deficiencies?

Paul's comments about the philosophers of his day certainly apply to our day:

"For all that can be known of God lies plain before their eyes; indeed God himself has disclosed it to them. Ever since the world began his invisible attributes, that is to say his everlasting power and deity, *have been visible to the eye of reason, in the things he has made.* Their conduct, therefore, is indefensible; knowing God, they have refused to honour him as God, or to render him thanks. *Hence all their thinking has ended in futility, and their misguided minds are plunged in darkness.* They boast of their wisdom, but they have made fools of themselves, exchanging the glory of the immortal God for an image shaped like mortal man, even for images like birds, beasts, and reptiles.

"For this reason God has given them up to their own vile desires, and the consequent degradation of their bodies. *They have exchanged the truth of God for a lie, and have offered reverence and worship to created things instead of to the Creator . . .*" (Romans 1:19-25, Revised English Bible, emphasis added).

Rampant unbelief and immorality have a great deal to do with denying and refusing to obey a Creator God.

"It is obvious that Darwin's theory no longer has the standing it had a few years ago," adds Dr. Hayward. "A small but significant minority of biologists have rejected it entirely, and are looking for a better theory to put in its place. So far, though, they have failed to find one . . . On the other hand, the case for the existence of the Creator is stronger today than it has ever been. In every branch of science there is a growing body of evidence that the universe and its contents have been *designed*—that things just could not be the way they

are as the result of chance.

"This evidence has so much weight that even some eminent scientists who are unbelievers have had the courage to face it . . . The most reasonable answer to the question: Creation? is surely: Yes—creation of some sort" (Hayward, p. 65, emphasis added).

"The resulting realization that life was designed by an intelligence," writes Dr. Behe, "is a shock to us in the twentieth century who have gotten used to thinking of life as the result of simple natural laws" (Behe, p. 252).

Not surprisingly, conclusions such as



Darwin's concept of the "survival of the fittest" has been used repeatedly to justify genocide against ethnic groups considered inferior.

these have not received much publicity. Most people are unaware of Darwinism's many flaws and voluminous scientific findings and conclusions that contradict evolutionary theory.

The consequences of accepting Darwinist theory have been profound. Enormous moral and social damage has been wrought in classrooms and to society. The theory that led Darwin to discard the Bible and reject the existence of God has had a profound effect on millions of other people.

It is no coincidence that Karl Marx, the father of communism, asked Darwin if he could dedicate *Das Kapital*, his landmark book on communism, to Darwin's honor or if he could write its introduction. After all, Marx believed Darwin had provided the scientific basis for communism. Darwin discreetly declined the offer.

"Genocide, of course," writes Phillip Johnson, "is merely a shocking name for the process of natural selection by which

one gene pool replaces another. Darwin himself explained this in *The Descent of Man*, when he had to deal with the absence of 'missing links' between ape and human. Such gaps were to be expected, he wrote, in view of the extinctions that necessarily accompany evolution.

"He coolly predicted that evolution would make the gaps wider in the future, because the most civilized (that is, European) humans would soon exterminate the rest of the human species and go on from there to kill off our nearest kin in the ape world. Modern Darwinists do not call attention to such passages, which make vivid how easily the picture of amoral nature inherent in evolutionary naturalism can be converted into a plan of action" (*Reason in the Balance*, 1995, p. 144).

Later Adolf Hitler indeed applied the Darwinist concept of the "survival of the fittest" to the human race. During World War II the Nazis forcibly sterilized more than two million people and began systematically exterminating people whom Hitler considered to be inferior. The Nazis justified their atrocities by rationalizing that they were doing mankind a service with "genetic cleansing" to improve the races.

As long as evolution—with its implications of amorality and the survival-of-the-fittest mentality among "superior" and "inferior" races—is accepted and believed, genocide, as sporadic ethnic cleansings in various parts of the globe show, will have a scientific justification, even though most believers in Darwinist theory would object to this conclusion.

The Bible prophesies that, before Jesus Christ's return, a worldwide commerce of human beings will be in place. This inhumane system will include the trading of "bodies and souls of men" (Revelation 18:9-13). Could this be possible? One only has to remember the Nazi holocaust. Hundreds of thousands were pressed into slave labor. Those too weak, ill, young or old to work faced a merciless death.

Remember, such events happened barely a generation ago in what were considered to be the most advanced and enlightened nations. It could happen again, especially in a world in which so many have adopted a belief in moral relativism and a survival-of-the-fittest outlook.

ing decoy fish. When hunting for other fish to eat, it raises its dorsal fin, which appears as a small, helpless fish, complete with an apparent mouth and eye.

It then stays motionless except for the dorsal fin, which it moves from side to side to make the decoy appear to open and close its mouth. The fin itself becomes transparent except for the upper part of the fin, which looks like a separate fish. It turns a bright red, enhancing the illusion of a smaller fish. This unassuming creature has just created an optical illusion that even a Hollywood special-effects artist would envy. To an incoming fish the decoy looks like an easy meal, and as it moves in for the kill it suddenly finds itself inside the jaws of the decoy fish.

As Dr. Huse notes: “The decoy-fish clearly exhibits great ingenuity, attention to biological details, and a sense of purposefulness. No matter how one contorts one’s reasoning, one cannot explain such a marvel in terms of the evolutionary theory. Such clear design does not result from mere chance but rather requires careful

and deliberate blueprint encoding within the DNA of the decoy-fish by a highly capable molecular programmer” (Huse, p. 36).

Dr. Huse notes other fish species that use similar deceptions to snare a meal. “One type of anglerfish has a ‘fishing rod’ coming out of its back with a luminescent ‘bulb’ at the end of it. Another, the deep-sea angler, has a ‘light bulb’ hanging from the roof of its mouth. It just swims around with an open mouth, dangling the lure from side to side. Small fish, attracted by the display, swim to their death right into the angler’s mouth!” (Huse, p. 36).

He also notes that anglerfish ha

without Him nothing was made that was made (John 1:1-3 emphasis added throughout).

Here the Bible reveals that before the creation of the heavens and the earth described in Genesis 1 the Word was with God and God made everything through the Word. None of this is revealed in the Genesis account yet these details help us understand who God was in the beginning and at the time of the earth's creation. We see that John gives us more information that helps us understand what happened in the beginning. On Genesis 1. (A better understanding who and what God is, and how the creation proves His existence please request your free copy of Life's Ultimate Question: Does God Exist?)

Similarly, Genesis 1:2 describes the earth as being without form, and void. This sketchy description offers no explanation for why the earth was in this condition. However, God reveals more details in other parts of His Word. We have to compile and consider all pertinent scriptures on a subject to gain a complete understanding.

For example in another passage God explains that angels were present at the creation of the earth. The book of Genesis doesn't mention this but it is an important truth. We find this detail recorded in the book of Job, where God asks Job: "Where were you when I laid the foundations of the earth? . . . Who laid its cornerstone when the morning stars sang together and all the sons of God shouted with joy?" (Job 38:4,6-7). The morning stars and sons of God on the angels exulted as they saw the earth miraculously come into being.

The angelic revolt

A key to understanding why the earth was without form and void involves what happened to some of these angels. Again, nothing of this angelic story is described in Genesis. But later in His Word, God reveals there was a great angel, Lucifer, who rebelled against Him. "How you are fallen from heaven, O Lucifer, son of the morning! How you are cut down to the ground you who weakened the nations! For you have said in your heart: 'I will ascend into heaven, I will exalt my throne above the stars of God . . . I will ascend above the heights of the clouds, I will be like the Most High.'" (Isaiah 14:12-14).

Here God explains that Lucifer had a throne representing a position of leadership and authority. He rose from somewhere

below to try to overthrow God but was cut down to the ground.

Where was this place where Lucifer had his throne? Jesus Christ, whom we saw earlier was the Word alongside God at the creation, reveals more details. "I saw Satan fall like lightning from heaven." He said (Luke 10:18). Lucifer, who became Satan, was cast down from heaven to the earth!

The Bible explains that Satan retains his authority over this planet. Notice that Satan told Christ: "Then the devil, taking Him up on a high mountain, showed Him all the kingdoms of the world in a moment of time. And the devil said to Him, 'All this authority I will give You, and their glory; for this has been desired to me and I give it to whomever I wish.'" (Luke 4:5-6).

Christ resisted this temptation but did not dispute the assertion of Satan's present authority. The Bible shows in many places that Satan has authority over the earth. He is even called "the god of this age" in 2 Corinthians 4:4.

It is no accident that in Genesis 3, shortly after God created Adam and Eve, Satan appeared on the scene. The earth was still in his domain. He had been cast down to earth before man's creation took place. As noted in the account of the tempta

We are introduced to the account of the creation of the earth in Genesis 1:1-2: "In the beginning God created the heavens and the earth. The earth was without form, and void; and darkness was on the face of the deep."

The original Hebrew wording, compared with other passages of Scripture, has led some to conclude that a considerable time interval is indicated between these two verses. If such an interval is indeed intended, there is no discrepancy between the Bible record and scientific discoveries that indicate that the earth could be much older than a few thousand years. If, on the other hand, there is no such gap, then the earth itself must be only around 6,000 years old—which most scientists consider an impossibility.

Do other passages, as well as history, shed any light on this question?

Some scholars propose that Genesis 1:2 can or should be translated "Now the earth *became* without form, and void . . ." as opposed to the common rendering "The earth *was* without form, and void . . ." Others dismiss this idea entirely. They assume the original Hebrew word *hayah* must be translated "was" and then assume the earth was originally created in this disorderly way.

However, as can be seen from many Bible helps, both translations of the term are possible. Only the context of the chapter and book can determine which one is correct. Gleason Archer, professor of biblical languages, comments: "It should be noted in this connection that the verb *was* in Genesis 1:2 may quite possibly be rendered 'became' and be construed to mean: 'And the earth became formless and void.' Only a cosmic catastrophe could account for the introduction of chaotic confusion into the original perfection of God's creation. This interpretation certainly seems to be exegetically tenable . . ." (*A Survey of Old Testament Introduction*, Moody Press, Chicago, 1974, p. 184).

In a footnote Archer adds: "Properly speaking, this verb *hayah* never has the meaning of static being like the copular verb 'to be.' Its basic notion is that of becoming or emerging as such and such, or of coming into being . . . Sometimes a distinction is attempted along the following lines: *hayah* means 'become' only when it is followed by the preposition *le*;

otherwise there is no explicit idea of becoming. But this distinction will not stand up under analysis. In Gen[esis] 3:20 the proper rendering is: 'And Adam called the name of his wife Eve, because she became the mother of all living.' No *le* follows the verb in this case. So also in Gen[esis] 4:20: 'Jabal became the father of tent dwellers.' Therefore there can be no grammatical objection raised to translating Gen[esis] 1:2: 'And the earth *became* a

wasteness and desolation.'"

Some scholars also argue against translating *hayah* "became" instead of "was" in Genesis 1:2 because they assume this interpretation came about only recently, after geology revealed the strata of the earth to be very old. Thus they consider this explanation a desperate attempt to reconcile the Genesis account with modern geology. The explanation that there existed an indefinite period between the initial beautiful creation described in Genesis 1:1 and the earth becoming waste and void in verse 2 has been called, sometimes disparagingly, "the gap theory." The idea was attributed to Thomas Chalmers in the 19th century and to Cyrus Scofield in the 20th.

Yet the interpretation that the earth

written records that take us back a little more than 5,000 years.

This is a tiny span compared with what most scientists consider the age of the earth and stars to be based on their research. Man, in an incredibly short time, built the pyramids—which to this day defy imitation. Man has traveled to the moon and sent spacecraft to explore our solar system and beyond. Such achievements show the enor

created angels to serve mankind. God is working out His plan of salvation on earth. The creation waits for the glorious moment when man inherits what God the Father planned from the start.

“For I consider,” writes Paul, “that the sufferings of this present time are not worthy to be compared with the glory which shall be revealed in us. For the earnest expectation of the creation eagerly waits

for the revealing of the sons of God. For the creation was subjected to futility [waste], not willingly, but because of Him who subjected it in hope; because the creation itself also will be delivered from the bondage of corruption into the glorious liberty of the sons of God” (Romans 8:18-21). (For more details, be sure to request your free booklets *What Is Your Destiny?* and *The Gospel of the Kingdom* from the

address nearest you listed on page 2.)

The Bible explanation

Can the Bible explain the fossil record, evidence pointing to an ancient earth and divine creation at the same time? Yes, it can. We don't know the details of what happened before man's time. But Christ has assured us that when He returns “there is nothing hidden which will not be revealed,

evening and the morning were the fourth day [yom].” It makes no sense for the meaning of *day* to change from a 24-hour day or the daylight portion of a day to an indeterminate period lasting millions or billions of years within a few sentences.

The account relaying the giving of the Ten Commandments confirms how long each of the creation days was, including the seventh-day Sabbath. Exodus 20:8-11 summarizes their significance:

“Remember the Sabbath day, to keep it holy. Six days you shall labor and do all your work, but the seventh day is the Sabbath of the LORD your God. In it you shall do no work . . . For in six days the LORD made the heavens and the earth . . . and rested the seventh day. Therefore the LORD blessed the Sabbath day and hallowed it [declared it holy].”

In defining when we are to keep one of God's annual Sabbaths, the Day of Atonement, God tells us that, “from evening to evening [24 hours], you shall celebrate your sabbath” (Leviticus 23:32). The same principle applies to the weekly Sabbath and all of the annual feast days. (You might want to write for our free booklet *Sunset to Sunset: God's Sabbath Rest*, to better understand this biblical command.)

Understanding Genesis 1:1-2

The first two verses of the Bible are critical in this discussion. “The Genesis prologue presents those historical truths which are the necessary presuppositions for the valid pursuit of human knowledge” (*The New Bible Commentary: Revised*, p. 81). So let's take a fresh look at Genesis 1:1-2.

Both the New International Version and the older Scofield Reference Bible suggest that the expression “the earth was without form and void” (verse 2) can be rendered “the earth *became* without form and void.” In other words, something spoiled the original creation described in Genesis 1:1 and made it necessary for God to restore order out of chaos—which He did during six 24-hour periods followed by a Sabbath rest.

The Companion Bible points out that, in the King James Version (and most subsequent translations), “the verb ‘to be’ is not

distinguished from the verb ‘to become,’ so that the lessons conveyed” in these first few verses “are lost.” It goes on to explain that without form (Hebrew *tohu*) “is used of a subsequent event which, we know not how long after the Creation, befell the primitive creation of Gen. 1.1.”

(For a detailed account of the rationale and reference sources that point to the possibility of the rendering “became” instead of “was,” see “Earth's Age: Does Genesis 1 Indicate a Time Interval?,” p. 29).

Suffice it to say here that God does not create by first making a mess (1 Corinthians 14:33). God told the cherub (angel) Lucifer, “You were perfect in your ways from the day you were created, till iniquity [lawlessness] was found in you” (Ezekiel 28:15). God is the God of perfection, order and beauty. It is either the angelic realm or man's world that makes the messes.

Comparing these different passages, we can infer that an original creation (Genesis 1:1) preceded the making of a gigantic waste by Satan (the former Lucifer) and a third of the angels (Revelation 12:4), who had become demons. Sometime later God accomplished a full restoration during six 24-hour days, followed by the day of rest that created the seventh-day Sabbath (Exodus 20:11).

The time gap between Genesis 1:1 and 1:2 is an unspecified period that could encompass an untold span of years, accounting for the “deep time” that geologists and other scientists have discovered in the last two centuries. So the Bible itself solves the enigma. We do not need to artificially lengthen the seven 24-hour creation days to resolve the problem.

More on creation

We can learn something every time we study the magnificent creation account in Genesis 1. Sometimes a word study or a different translation can shed new light on a passage and yield fresh understanding.

Consider the Hebrew word *moed* in Genesis 1:14. This word has a variety of meanings and is translated in several ways, including “season,” “appointed time,” “feast(s),”

“congregation” and “assembly” in the King James Version. Translators generally look at the context of the verse to determine the appropriate choice of wording.

The context of Genesis 1:14-16 explains that God created the lights in the heavens to mark time. In recognition of this concept, most Bibles translate *moed* in Genesis 1:14 as “seasons.”

It is interesting to note that this same Hebrew word is later used by God in Leviticus 23:2, 4 to designate specific periods—occasions designated as “feasts” and “holy convocations” when there were to be public assemblies for worship. In recognition of the future role *moed* would serve in designating feast days, the Revised English Bible renders Genesis 1:14: “God said, ‘Let there be lights in the vault of the heavens to separate day from night, and let them serve as signs both for festivals and for seasons and years.’”

From the outset of time as we humans know it, *moed* in Genesis 1:14 anticipates God's intentions for the good of mankind. God gave the Sabbath at creation just after He made man (Mark 2:27). But He revealed the biblical festivals much later to the “church in the wilderness” (Leviticus 23; Acts 7:38).

As is the case with the seventh-day Sabbath, the annual festivals are important for understanding God's plan for mankind. Yet mere knowledge of their existence is insufficient. By actively observing the biblical festivals each year, Christians act out the very plan of God, growing in understanding of God's purpose (2 Peter 3:18).

Their timing is interwoven with the seasons of the northern hemisphere. God's year does not begin in the dead of winter as on our humanly devised calendars, but in the spring when green plants emerge from the earth, birds are flying, and the creation in general brightens with resurgent light and heat.

The United Church of God publishes a booklet that explains the meaning of the annual biblical festivals. Please request your free copy of *God's Holy Day Plan: The Promise of Hope for All Mankind*.

nor has anything been kept secret but that it should come to light” (Mark 4:22).

Instead of wandering through the confused, chaotic maze of the theory of evolution like so many, we should look to God’s Word for assurance. It is ther