# The Herald
## Of Christ's Kingdom

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## EDITOR's JOURNAL

***He that built all things is God. — Hebrews 3:4***

The most fundamental issue of our faith is that God exists, and that he is the first cause behind all that we see about us, of our very selves, indeed of even the unseen spiritual realm. "In the beginning God ..." is the eloquent testimony of God's ultimate primacy with which the sacred scriptures open.

This primacy marks God as the ultimate authority to properly direct his intelligent creatures, and we instinctively revere such power and majesty. But when we further learn of God's grand character, that "God is love" in all his motivations, so thoroughly just that he will not himself infringe on this principle for any cause, and in every way intelligent and wise beyond our comprehension, we are properly compelled by our deliberations to respond with obedience, sacred reverence and devoted love.

**God's First Creative Act**

The first of God's creative works was the Logos, by name Michael before his descent to Earth to become our Redeemer, where he received the name Jesus (savior), and the title Christ (anointed). John affirms that Jesus was "the beginning of the creation of God" (Revelation 3:14). The word "beginning" is from the Greek archee, which means "a commencement" or "chief (in various applications of order, time, place or rank)" (Strong's Concordance #746). John used this word 23 times in his writings. In each case he intended the first and primary meaning, and in each case the common version of our Bible correctly translates it "beginning." Jesus preceded all else.

The same thought is expressed in Proverbs 8:22, 23. "The Lord created me the first of his works long ago, before all else that he made. I was formed in earliest times, at the beginning, before earth itself." (Revised English Bible) In this passage Jesus is the personification of Wisdom (verse 1). Christians from the earliest times applied this text to Jesus in his pre-human existence, and the title "the Wisdom of God" is expressly applied to Jesus in Luke 11:49 (compare Matthew 23:34).

No wonder Paul designates Jesus "the firstborn of every creature" (Colossians 1:15). It then pleased God to use Jesus as his agent of creation thence forward. "By him were all

things created, that are in heaven, and that are in earth, visible and invisible ... all things were created by him ... he is before all things, and by him all things consist" (Colossians 1:16, 17).

Notice the two words "by" in this passage. The first is from the Greek en, properly "in," the second dia, properly "through." This is consistent with Paul's other declaration that "There is but one God, the Father, of whom are all things ... and one Lord Jesus Christ, by [dia, through] whom are all things" (1 Corinthians 8:6). God is the Great Creator. His agent, in or through whom he executed hiswork, is his dearly beloved son Jesus. "Through him all things were made" (John 1:3, NIV).

**In the Begininng . . .**

These familiar words of Genesis 1:1 refer not to the very beginning, when God was alone, nor to the creation of his son, nor to the creation of the angelic hosts. The beginning here is of the visible creation we see about us. When this occurred "the morning stars sang together, and all the [angelic] sons of God shouted for joy" (Job 38:7).

Since Jesus is elsewhere designated "the bright and morning star" (Revelation 22:16), and Lucifer before his deflection was "O day star, son of the morning" (Isaiah 14:12, margin), perhaps these were the "morning stars" which sang with joy at the formation of Earth.

Certainly John was aware of the opening of Genesis when he penned the opening of his gospel, affirming that at that beginning Jesus, the Word of God, already was. "In the beginning was the Word, and the Word was with God" (John 1:1). John opens his first epistle in almost the same way. "That which was from he beginning ... the Word of life ... was with the Father" (1 John 1:1, 2). "When he set the heavens in place I was there ... when he made the earth's foundations firm ... I was at his side each day, his darling and delight" (Proverbs 8:27-30, Revised English Bible).

**Thanks to God our Creator**

How thankful we are to him for life and joy. How thankful we are to have his guidance, by moral precepts implanted in the human heart, an inborn sense of conscience, and the regulating instructions of his Word. How thankful that he is an ultimate authority for all the issues of our existence.

This issue of **THE HERALD** is devoted to God as Creator. We begin with an examination of the creative days of Genesis chapter one. In elegant language, God has provided an account of the central work of each of seven epochs preparing Earth as the everlasting home for his human family. The details of these days are examined in *Highlights of Creation*.

Though God rested from his creative activity on the seventh epoch-day, he had in mind another creation, a New Creation, as an act of mercy and kindness not only toward the elect, but to benefit even the non-elect during the Millennial Kingdom. Indeed, without

the New Creation, the Old Creation would never secure its release from the thralldom of sin. *Old Creation, New Creation* traces some interesting scriptural parallels between the two works.

The scriptural record is clear. God in the beginning created a single human pair, Adam and Eve, who became the parents of all living humans. Therefore Eve is the one woman who is the mother of all women living today. Likewise all living men can trace their parentage back to one man, Adam. But we can advance forward in time to locate another man with the same distinction, father Noah. In the fascinating article *Creation, Evolution, and DNA* we consider some recent biological evidence supporting the contention that all living women descended from one woman, and all living men descended from one man, that is consistent with identifying these forebears as Eve and Noah respectively.

Since Darwin published *The Origin of Species*, the Creation-Evolution debate has continued strong. Clearly it has pleased God to use natural processes to produce variety and diversity among living forms. But recent scientific evidence increasingly accords with the Bible that different "kinds" of life were established distinct from others, at different periods. The article *The Creation-Evolution Controversy* considers this evidence, and explains some of the intense problems exponents of evolution theory face today.

The next article, *Does Scientific Evidence Point to a Creator?*, reports some surprising evidence from modern physics, astrophysics and cosmology, which explains how precisely the physical laws of the universe have been adjusted and balanced in order to allow the physical existence of life as we know it. (Not just any "big bang" would work!) This intriguing information is pushing the scientific world to face the logical requirement for an overriding intelligence in the formation of the universe.

Among the testimonies of Genesis disputed almost as much as special creation is the narrative of the flood "whereby the world that was, being overflowed with water, perished" (2 Peter 3:6). But unknown to many, remarks about a catastrophic deluge only a few thousand years ago have been permeating scientific literature in recent years. The latest findings draw from a variety of scientific disciplines, and the various strands are pieced together for us in the article *The First World, The Flood, and Current Scientific Consensus*. This is state-of-the-art material. Much of it has appeared in science journals in only the last two years.

Finally we close with an article titled *Jehovah, the Omniscient*, a verse by verse study of Job 38. How wonderfully God speaks to Job about the majesty of creation. How has all this greatness come to be? "Declare if thou knowest" implores the Heavenly Father. And if not, then let us trust the great wisdom so mightily displayed throughout creation. Let us trust our great Creator, and never fail in our faith to trace his goodness, and trust his providence, even when outward circumstances turn difficult for us. What a God! What a Caretaker! What a Creator!

# Highlights of Creation

***In the beginning God created the heavens and the earth. — Genesis 1:1***

*Charles Redeker*

The record of creation as presented in the opening pages of the Bible is accepted by believers as inspired of God and accurate. But even skeptics have been impressed by its uniqueness. Of scores of ancient creation accounts, whether from Sumeria, Egypt, China, Persia or elsewhere, the biblical record is the only one that approaches a scientific framework. All others are colored with fabulous legends, crude stories, contradictory assertions, and extremes of sensualism involving a host of gods and demi-gods. In contrast, the Bible depicts the work of creation in a definite, reasonable order that agrees with modern science.

In examining areas touched upon by both science and the Bible, we need to observe certain precautions. Some scientific conclusions may be based largely on theory and conjecture. Some biblical interpretations may be based on an incorrect understanding of the text. It is only when the science is factual and the Bible is correctly interpreted that we can expect to find harmony between the two. This is what we hope to accomplish in the verse by verse study that follows, using a composite translation of Genesis which emphasizes the literal Hebrew text.

## Creation of the Earth

*"In the beginning God created the heavens and the earth" — Genesis 1:1.*

This is one of the most sublime statements of Scripture — the great fundamental truth that God is responsible for bringing the earth into existence. The "beginning" here probably refers to when the Creator turned his attention to forming our planet, rather than to the universe as a whole. This is substantiated by Genesis 2:1, which summarizes this phase of the creative work and preparation for human habitation in the expression "Thus were finished the heavens and the earth and all their host." (See also Genesis 1:8.)

A clear distinction may be drawn between the beginning of earth’s creation (verse 1) and its subsequent ordering in the epoch days that followed. Since the time interval between the events in Genesis 1:1 and 1:2 is not stated, the Bible does not commit itself as to the age of the earth, even if the lengths of the epoch days were clearly stated. Consequently, there is no conflict between science and Genesis on the actual age of the earth itself.

## Epoch Day One

"And the earth was waste and desolate. And darkness was upon the face of the [roaring] deep. And the Spirit of God was brooding [as a bird over its nest] continually upon the face of the waters. And God said, Let there be light: and there was light. And God saw the light, that it was good; and God divided between the light and the darkness, and God called the light Day, and the darkness he called Night. And there was evening and there was morning, the First Day" — Genesis 1:2–5.

The creative days of Genesis were actually epoch days consisting of geologic periods, probably of equal length. It is unnecessary to insist that these days were only 24 hours since the same word for "day" (Hebrew yom) is elsewhere used to denote longer periods: Psalms 95:8, "day of temptation in the wilderness" (40 years); Genesis 2:4, "in the day that ... God made the earth and the heavens" (covering all six epoch days). At the other extreme, the deductions of some geologists, postulating millions of years for these periods, may be regarded as speculative.

Rotherham suggests the "light" of this day was diffused, in contrast to the more distinguishable light afforded on the Fourth Day. This is consistent with the Valian or Canopy theory, which visualizes the earth as a flaming mass shortly after creation, a glowing waste which vaporized the waters and other minerals into bands or canopies that encircled the earth. Job 38:9, "thick darkness a swaddling band," seems to augment this thought. As the various rings cooled, they fell back to earth in layered deposits, allowing the atmosphere to gradually clear.

God’s spirit "brooding" upon the face of the waters is a very intriguing description of his very first act in this epoch. This was Divine Energy radiating outward upon the primitive seas, producing what only Divine Power can accomplish — the appearance of the earliest forms of life. It is gratifying to note that science agrees with this sequence that earliest life stemmed from the oceans! However, these earliest marine creatures were not crude or partially developed, as some would portray them, but were complex wonders in their own right.

## Epoch Day Two

*"And God said: Let there be an expanse in the midst of the waters, And let it divide the waters from the waters. And God made an expanse, and divided the waters which were under the expanse [ocean] from the waters upon the expanse [clouds]; and it was so. And God called the expanse heaven. And the evening and the morning were the Second Day." — Genesis 1:6–8.*

In this era God created the atmosphere or "expanse," suggesting something thin or spread out over the earth, like a blanket or tent. (See Isaiah 40:22.) The wisdom and expertise of a Divine Chemist were needed to bring about the critical combination of gases such as oxygen and nitrogen that were required for higher forms of life that were to follow.

Up until this point, there evidently was no clear separation between the vapors above and waters below. The atmosphere now served to separate the two, with an outer ring or band of waters that apparently lasted until the flood. The atmosphere extends upwards between 200 and 300 miles, but becomes so thin above a four mile height that humans could not live.

## Epoch Day Three

*"And God said: Let the waters under the heavens be collected unto one place, and let the dry land appear, and it was so. And God called the dry land Earth [soil — surface of the ground] and the reservoir of the waters called he Seas, and God saw that it was good. And God said: Let the earth bring forth tender sproutage, the herb yielding seed after its kind and the tree yielding fruit whose seed is in itself, upon the earth: and it was so ... and God saw that it was good. And the evening and the morning were the Third Day."— Genesis 1:9–13.*

As the earth cooled further, the weight of the surface waters buckled the crust, forming depressions and elevations which became seas and dry land. Most of the earth's surface (70%) eventually was covered with water and remains so today. Primitive plants and trees now were brought forth to cover the land areas.

"Grass" in the King James version should be "sproutage" — vegetation of all types, not limited to grass. This was very vigorous in growth because of the humid, cloudy and swampy conditions that prevailed, with an abundance of carbon dioxide in the atmosphere. Coal beds were formed in this period, as plants absorbed the carbon and were compacted by heavy pressures and upheavals. Here is an inspiring example of the principle of conservation: while vast plant and wooded areas were being destroyed, they were also providentially being converted into energy sources to satisfy the needs of mankind for ages to come!

## Epoch Day Four

*"And God said: Let there be lights in the expanse of the heavens, to divide the day from the night; And let them be for signs, and for seasons, and for days, and years ... and it was so. And God appointed the two great lights; the greater light to dominate the day, and the lesser light to dominate the night, and the stars. And God set them in the expanse of the heavens to give light upon the earth ... and God saw that it was good. And there was evening and there was morning, the Fourth Day." — Genesis 1:14–19.*

As the atmosphere began to clear, the sun, moon and stars became more visible. The Hebrew word asah, translated "made" in the King James, does not mean "to create," but here signifies "to appoint" (as in Job 14:5, Psalms 104:19). God was giving a new appointment or function to the sun, etc., to dominate or "rule" in the heavens, which was lacking in the previous Carboniferous Period.

The increased solar radiation brought about dramatic changes in climate in this period and the process of photosynthesis so basic to the cycle of all life on earth. It marked the end of the primary era known as the Paleozoic and opened the secondary or Mesozoic Era, with its sweeping changes in life forms adapting to the new hot and dry conditions.

## Epoch Day Five

*"And God said: Let the waters swarm with swarms of living creatures [living souls], And let winged things wing above the earth in the open expanse of heaven. And God created the great monsters, and every living creature that glided swiftly, with which the waters swarmed after their kind, and every winged thing after its kind: and God saw that it was good. And God blessed them, saying, Be fruitful, and multiply, and fill the waters in the seas, and let winged things multiply in the earth. And there was evening and there was morning, the Fifth Day.'' — Genesis 1:20–23.*

Our great God is depicted here as one who just delighted in creating — bringing forth multitudinous varieties of life under the widest possible range of conditions. Biologists identify some 9,000 species of fish, 6,000 of reptiles, 9,000 of birds and 700,000 species of insects, not to mention a wide variety of modern plants brought forth in this epoch. Each displays contrasts in size, shape, texture, color and structure; and all are part of the breathtakingly beautiful environment which the Divine Architect planned for the enjoyment of his highest earthly creation — man himself.

The King James "whales" is better translated "monsters," which allows for great land animals as well as sea creatures. It was the age of the dinosaurs, meaning "terrible lizards." They were of great variety in size, some reaching 40 tons in weight. The biggest was Diplodocus, the longest animal ever found to walk on earth — 16 feet tall and 85 feet from head to tip of tail!

Modern birds and plants now also appeared in all their color, beauty and high degree of specialization. Every flowering plant has its own special seed and pollen and an

extraordinary intricacy of design. Their sudden arrival on the scene, as with the various animal species, without any gradual development in preceding fossil ages, remains an unsolved puzzle to the evolutionist.

## Epoch Day Six

*"And God said: Let the Earth bring forth living soul after its kind, cattle and creeping thing, and beast of the earth after its kind: and it was so ... and God saw that it was good. And God said: Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in his own image, in the image of God created he him; male and female created he them. And God blessed them, and God said unto them, Be fruitful and multiply, and fill the earth and subdue it ... And God saw everything that he had made, and behold, it was very good. And there was evening and there was morning, the Sixth Day." — Genesis 1:24–31.*

Modern land animals (mammals) now were created, including both the wild beasts of the field and domesticated types. These are the highest form of animal life, with some 5,000 species recognized. They vary in size from the tiny bat to the giant land elephant. Their young are all brought forth by live birth, rather than hatching from eggs like birds and fish. It is a miraculous process involving conception, gestation, birth and growth to maturity.

The phrase "after its kind" used to describe the propagation of the new life in each era is of special note. This represents a basic and profound biological principle which the Creator has imbedded in the core of every living thing. It means simply that every form of life was designed to reproduce only within a limited family grouping, to insure the integrity of the various orders. This principle of fixed species is the very opposite of evolution and absolutely forbids the gradual changing of one kind into another. A thorough study of the fossil record has never uncovered a crossing over of major kinds of life, going all the way back to Cambrian times!

Toward the close of the Sixth Day came God’s crowning work — the creation of man. "God formed man of the dust of the ground, breathed into his nostrils the breath of life and man became a living soul" (Genesis 2:7). Thus man was created directly by God, in his very own image: this implies mental faculties of reason, judgment and will, moral qualities of love and justice, and the propensity to worship his Creator. As king of nature’s realm, he was given responsible dominion over the earth and the animal kingdom, and told to be fruitful and multiply, under conditions of Edenic bliss.

Here is where every believer in the Bible must take his stand. The wording is clear; there is no possibility of mistake. Man is not the end product of a long chain of evolution that began somewhere in the unknown past. The inspired record states plainly that man was created by God in his own image and that he began immediately thereafter to function as an intelligent human being. There is just no support whatever for the "caveman" notion or

similar concepts of "fossil man" — part human and part animal — as taught by evolutionists today. Such a God-dishonoring theory is not a product of valid intelligent thought, but of "science falsely so called." (See Romans 1:18–32.)

## Epoch Day Seven

*"Thus were finished the heavens and the earth and all their host. And by the Seventh Day God had finished his work which he had made; and he rested on the Seventh Day from all his work which he had made. And God blessed the Seventh Day, and hallowed it ... These are the geneses [historical accounts] of the heavens and of the earth when they were created, in the day that Jehovah God made earth and heaven." — Genesis 2:1–4.*

God's resting on this day "from all his work" was not from tiredness, since we are told that "the Creator of the ends of the earth fainteth not, neither is weary" (Isaiah 40:28). Rather, God rested by placing in the hands of another — his son Jesus — the responsibility for perfecting the human creation. Very quickly in the Seventh Epoch Day sin was to manifest itself in the human family and a new phase of God's plan would begin. The matter was to be entrusted to the redeemer, Jesus, in a program that called for a lesson in the bitter consequences of disobedience to God, an atoning sacrifice and finally the opportunity for everlasting life in the kingdom.

The expression "evening and morning," regularly used to describe the first six days, significantly is lacking here, suggesting that the Seventh Day is yet in progress. At the start of each epoch a certain amount of confusion and uncertainty prevailed, termed "evening" or darkness. By the close of each period, it became abundantly evident what God had intended to accomplish, hence described as "morning" or light. (For a similar principle see Zechariah 14:6, 7.) Thus, not until the end of the Seventh Day, when the messianic kingdom rule will have restored mankind to harmony with God and the earthly creation is completed, will it be appropriate to say, "And there was evening and morning, the Seventh Day."

## Conclusion

In depicting the work of the creative days, the Genesis account has laid out an orderly and logical arrangement that is in complete agreement with the findings of science. The odds against the writer of Genesis having merely correctly guessed this sequence are staggering beyond all reason. No thinking person should survey the beauty and harmony of nature and the amazing interrelationship of environment and life without giving due credit to our great God.

Chance creation and chance evolution could not produce such wondrous works. The Bible tells us it was accomplished by the purposeful creation of our loving, wise, and all-powerful God. And stretched out before us in the majesty of the earth, sea and sky, we indeed have found the unmistakable touch of the Creator's hand. All nature has thus united in guiding us to this conclusion, a conclusion corroborated in the Genesis account. (See Psalms 148:1–13.)

How wonderful that this same Creator has made provision through the Savior, Jesus, to complete the earthly creation through the uplifting work of the messianic reign, restoring mankind to perfection and the joys of everlasting life in harmony with him!

Parallels in the Creative Work

# Old Creation, New Creation

***If any one be in Christ, he is a New Creation; the old things have passed away; behold they have become new. — 2 Corinthians 5:17, Wilson Diaglott***

*David Rice*

Those who closely examine the Genesis account of Creation will notice some striking parallels between the work sequenced in the creative days of Genesis 1 and the sequence of symbols which describe the developing work of the Gospel Age in Revelation.

But years before Revelation was composed, before those symbols had ever been revealed to the Apostle John on the Isle of Patmos, the Apostle Paul recognized a parallel between the ancient creation of things mundane and the new work of the Spirit, the New Creation. Paul mentions one feature of this comparison in 2 Corinthians 4:6. "For God, who commanded the light to shine out of darkness, hath shined in our hearts, to give the light of the knowledge of the glory of God in the face of Jesus Christ."

Probably this was more than just a poetic comparison. Perhaps Paul saw the seeds of this comparison in the words of the prophet Jeremiah, in the fourth chapter. That chapter contains the prophet's rebuke against Israel in his day, but as one reads the language it is easy to see that the words contain a deeper meaning for a later time.

"If thou wilt return, O Israel, saith the LORD, return unto me ... then shalt thou not remove [but they did not heed, and were scattered abroad]. And thou shalt swear, The LORD liveth, in truth, in judgment, and in righteousness; and the nations shall bless themselves in him [the gentiles who received Christ did just that] ... For thus saith the LORD to the men of Judah and Jerusalem ... Circumcise yourselves to the LORD, and take away the foreskins of your heart ['circumcision is that of the heart,' Romans 2:29]" (Jeremiah 4:1–4).

Jeremiah recognized such repentance was not forthcoming, and predicted the consequences (verses 7–13). The Babylonians worked this vengeance in Jeremiah's day, and the Romans in Jesus' day. Then Jeremiah expressed the sad conditions in Judaism in terms drawn from Genesis. "I beheld the earth, and, lo, it was without form, and void; and the heavens, and they had no light" (Jeremiah 4:23). Was this perhaps the key for Paul's analogy?

**The Step-by-Step Comparison with Revelation**

It is not our purpose here to interpret all the symbols involved, but merely to notice the similarities which suggest a divinely intended comparison between the creations.

The Genesis account of creation is in seven parts, frequently styled the seven creative days. When Revelation describes the Gospel Age during which the New Creation is produced, it also breaks the work into seven parts, and does so in a sequence of three visions — the seven churches, seven seals, and seven trumpets. Each of these traverses the Gospel Age from a different perspective.

It is in the last series, the trumpets, that we find the symbols comparing to the Genesis narrative. The seven trumpets of Revelation are the pronounced judgments of God through the age, the one place among the three narratives where God's voice, as it were, is trumpeted out with commanding authority. This reminds us of the Genesis narrative in which the work of each day is preceded with the commanding declaration: "And God said."

In both narratives the "earth" simply "is" before the sequence of seven unfolds, and in both it is the subject of the following activity (Genesis 1:1, 2, Revelation 8:5, 6). Then the sequence proceeds.

(1) "Let there be Light" (Genesis 1:3). In the first trumpet period, as the Gospel Age opened, the "light of the knowledge of the glory of God in the face of Jesus Christ" (2 Corinthians 4:6) shone out into the world. But this blessing of truth implied some hard judgments upon Judaism, which rejected their Messiah, and therefore it is represented by the symbols hail and fire in the first trumpet.

(2) In the second trumpet the sea is affected (Revelation 8:8); in the second creative day the vast terrestrial ocean was distinguished from the vapors above by the intervening firmament.

(3) In the third trumpet the rivers were affected (8:10); in the third day the rivers were produced by the draining of the rising land surfaces.

(4) In the fourth trumpet the sun, moon and stars were affected (8:12); in the fourth day the sun, moon and stars were appointed to shine distinctly.

(5) In the fifth trumpet the "air" was affected (9:2); in the fifth day the fowls which fly through the air were created.

(6) In the sixth trumpet 200,000,000 powerful horses are unleashed (9:16); in the sixth day the large land animals were created.

(7) The seventh trumpet introduces the Kingdom of Christ, the millennial Sabbath when mankind rests from the burden of sin and the curse; the seventh day began God's rest from his creative activity.

Each of these stages was important in the development of the New Creation as a corporate whole during the age. Before the gospel could spread and develop prolifically, first Judaism and then the Roman Empire had to be overturned, and this was the work of the first two trumpets. The Jewish "trees" were burned, and the Roman "mountain" was subdued by the "sea" of barbarian invaders from the north.

Perhaps Jesus symbolically predicted the pending doom of both these institutions when he told the disciples "If ye have faith, and doubt not, ye shall not only do this which is done to the fig tree [which had withered as Israel would], but also if ye shall say unto this mountain, Be thou removed, and be thou cast into the sea [as would happen to the Pagan Roman Empire]; it shall be done" (Matthew 21:21). Even the time of our Lord's statement was significant, for as he walked on into the temple area that morning he was accosted by his enemies, who subsequently sent "Pharisees [representing Judaism] and ... Herodians [partial to Rome] to catch him in his words" (Mark 12:13).

As the Gospel Age would go on, because "the love of many shall wax cold" (Matthew 24:12), the precious truth Christ brought would become perverted. This is represented in trumpet periods three and four, when the rivers of refreshing water were turned putrid, and the light of the gospel (sun), the types of the law (moon), and the apostolic lights (stars) were darkened.

But in time the Lord would send a powerful messenger to unlock the dormant truths of the Bible, causing great commotion and confusion in the ecclesiastical heavens. This was the work of Luther in the fifth trumpet, and its successor stage was even more devastating, as the 200,000,000 horses arrayed for war symbolized the ravaging of Christendom during the French Revolution and the Napoleonic Wars.

All of this was necessary that the Two Witnesses, the Old and New Testaments, could shed the sackcloth of the dark ages and ascend to heavenly prominence (Revelation 11:12) in renewed splendor and popularity to prepare for the harvest of the age. And then the fateful announcement of the Seventh Trumpet, "The Kingdom of this world has become the Kingdom of our Lord and of his Christ," introduced the work of our returned King, the Lord of Harvest, to complete his church and put an end to the false perpetrators.

**Working on His Rest Day**

There is an apparent contradiction in God developing the New Creation during the seventh creative day which he declared his day of rest. On one occasion during our Lord's ministry when he was accused of "working" on the Sabbath day because he healed the afflicted, Jesus alluded to this matter. "My Father worketh hitherto, and I work" (John 5:17). But how is work on the day of rest permissible?

Jesus answered this on another occasion when he was also challenged for healing on the sabbath. "He said unto them, What man shall there be among you, that shall have one sheep, and if it fall into a pit on the Sabbath day, will he not lay hold on it, and lift it out? How much then is a man better than a sheep? Wherefore it is lawful to do well on the sabbath days" (Matthew 12:11, 12).

This is the answer. Works of kindness, of mercy, of goodness, are not excluded on the Sabbath. And God's work of developing the New Creation is all of these, not only toward themselves, the chief beneficiaries, but also to the whole world, who will receive a raising back to life through the ministry of the New Creation during the Kingdom. (Revelation 20:6)

In this kind of work we can be energetically engaged. He who has "entered into his rest ... [and] ceased from his own works," is nevertheless admonished to "labor ... to enter into that rest" which remains for us beyond the veil (Hebrews 4:10, 11).

Creation Account Confirmed

# Creation, Evolution, and DNA

***I will praise thee; for I am fearfully and wonderfully made. — Psalms 139:14***

*James Parkinson*

Two efforts have recently been published on DNA comparisons of the world's women and men. The conclusion is that all women in the world have descended from a single female ancestor, and that all men in the world have descended from a single male ancestor. Moreover, the common male ancestor was more recent than the common female ancestor. [In Genesis, Noah is about 25% more recent than Eve.] The attempts at dating seem to yield conflicting results. Part of the attempt at dating these common ancestors is consistent with the Genesis account of Creation, while the other part is too ancient for Genesis and too recent for any known evolution views.

With a diminishing number of scientific ways to distinguish between creation and a continually changing evolution, DNA sequencing is a new arbiter.

In order to discuss evolution, pro or con, it is necessary to recognize that there have been three successive theories of evolution, thus far:

(1) Variation Theory (Darwin, lasted into the 20th century; now dead)

(2) Mutation Theory (DeVries, lasted into the late 20th century; dying out)

(3) Calamity Theory (Gould, beginning in the 1970s)

Darwin postulated that genetic characteristics came from every part of the body, that each succeeding generation had a progressively wider variability potential, and that nature selected out those variations which were best able to compete for scarce food. Mendel's discovery of genetic laws, even before discovery of DNA (deoxy ribonucleic acid), undermined the first two assumptions. DeVries' discovery of mutations, just after the turn of the century, was its death knell, though mutations were later invoked as the mechanism of a not-quite-so-uniform evolution (Theory 2). Failure of Mutation Theory to lead to the production of new and viable species, plus the failure to find much suggestion of any transitional forms, weighed down upon it also. Thus, Stephen Jay Gould and others hypothesized that there is no progressive evolution, but that a punctuated equilibrium ("punc eq") resulted from some great cataclysm, which by its enormous stress produced a broad spectrum of genetic freaks, of which only a tiny minority could survive: these few then expanded into a food-rich environment. Gone are all three fundamental assumptions of Darwin: (1) All things have proceeded at a constant rate (including the geologic deposition rate, by which time has been estimated), (2) evolution is progressive from generation to generation, and (3) the species competed in a food-rich environment.

To the paleontologist in the field, the predictions from Calamity Theory (Theory 3) are now about the same as from Creation Theory (using the Day-Age theory for Genesis 1–2). Thus, the creationist will exult that evolutionists have been compelled to change their theory to look like Creation Theory. However, there is now an opportunity to distinguish between these two: DNA.

In 1987 a UC Berkeley group reported that DNA studies of a larger number of women worldwide show that they are all descended from a common female ancestor.1 Molecular filaments extending from the DNA nucleus — called mitochondrial DNA (mtDNA) — are inherited maternally. Of ~1016 mtDNA molecules within a typical human, they are usually identical. Mutations of mtDNA occur several times faster than those in the nucleus, so that there are sufficient differences in the global population to be statistically significant (even though a majority of code sites still show no variation).

In 1995 Dorit, et al., reported that paternally-inherited DNA studies of a representative cross section of the world's male population show no variation, and hence that all men are descended from a single male ancestor.2 Special care was taken to assure a representative distribution throughout the world's ethnic population. They express surprise, as the finding is inconsistent with expectations from evolution theories. Using a mean mutation rate deduced from an evolutionary framework, they calculate that the common male ancestor was less than 800,000 years ago (95% confidence) and probably less than 27,000 years ago, assuming a rapidly diverging population (the star model). Because the mutation rate is much more likely to have been underestimated than overestimated, these ages are likely to be reduced further.3

Along a parallel line, the incompatibility of a monogenesis of humanity and an assumed polygenesis of language is in process of being resolved by a monogenesis of language also.4 Roger Wescott discusses the paradox (BPX 33, p. 56), while V.M. Illic-Svityc has reconstructed nearly seven hundred Nostratic words (the root language for about 60% of the present world's people). Václav Blazek has traced twelve world roots ("Materials for Global Etymologies," BPX 20, pp. 37–40), while John Bengtson expands on them ("Eve's Dictionary," and "Global Etymologies and Linguistic Prehistory," BPX 33, pp. 474, 480). Of five thousand languages in the world, Ruhlen lists fewer than a dozen isolates that do not apparently fit into one of about a dozen major proto-language groups. (One of these, Sumerian, or Old Babylonian, is probably referred to in Genesis 11, from which it might be inferred that it was invented.)

The deduced existence of a single female ancestor, and also of a probably-later single male ancestor, is easily understood in terms of the Genesis account of (Adam and) Eve and then Noah. The dating of the common female ancestor is not now concordant with the Genesis chronology, though redating the colonizations of Australia and New Guinea consistent with Genesis chronology presently comes within a factor of two for Eve; the upper-limit dating of the male ancestor is consistent with both Adam and Noah. The evidence for a common origin also of language is consistent with Genesis 11:1, "And the whole earth was of one language and of one speech." (ASV)

While the last word has yet to be spoken on the DNA evidence, as of now challenging the Genesis account has been, and still is, fraught with risk.[5]

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1. Rebecca L. Cann, Mark Stoneking, and Allen C. Wilson, "Mitochondrial DNA and human evolution," Nature, 325, pp. 31–36 (1 January 1987).

2. Robert L. Dorit, Hirashi Akashi, and Walter Gilbert, "Absence of Polymorphism at the ZFY Locus on the Human Y Chromosome," *Science*, 268, pp. 1183–1185 (26 May 1995).

3. Dorit, et al., consider four possibilities: (1) A recent origin for modern Homo sapiens, (2) A recent selective sweep, (3) Recurrent male population bottlenecks, or (4) Historically small effective male population sizes (which they dismiss in footnote 15 as implausible for a 300,000 year period). The first would suggest Adam, the second and third would suggest Noah, and the fourth lacks credibility.

4. *First International Interdisciplinary Symposium on Language and Prehistory*, Ann Arbor, 1988, November 8–12, ed. Vitaly Shevoroshkin, 5 volumes (BPX 20, 23, 25, 32 and 33); Bochum, Germany: Studienverlag Dr. Norbert Brockmeyer. See also Merritt Ruhlen, A Guide to the World's Languages, Volume 1: Classification, Stanford University Press, 1987.

5. The risk is to some extent dependent upon the understanding of what is meant by the Genesis record. If the creative days are understood as long epochs of time, the difficulties are minimal, with human creation somewhat before BC 4100, the Flood about BC 2472, and the seventh creative day not yet complete. The solar-day creative-week concept is difficult to harmonize with anything happening before about BC 4129. The gap theory (of an earlier human creation destroyed before the creation of Adam, based on a translation "The earth became without form and void") allows broad possibilities before BC 4129, but the theory seems to be losing its advocates.

# The Creation-Evolution Controversy

***God created man in his own image ... male and female created he them.***
***--Genesis 1:27***

The evolution theory has frequently been accepted as fact. But now the theory of evolution is experiencing powerful challenges. Scientific theorists, recent discoveries of species believed to be extinct, and massive fossil evidence unearthed during the last 100 years have shaken the basic tenets of Darwin's theory. However, very few of the essential problems have been widely publicized, and the theory of evolution continues to be taught in many schools as fact.

As we review the problems evolution faces today, we will find repeatedly our Creator's signature in the material creation of life on earth.

**Progressive Upward Change**

Significant positive change as proposed by the theory of evolution requires a gradual accumulation of characteristics to provide a net beneficial quality. But since all functioning organs in the human body are themselves complex interdependent systems, from a purely theoretical standpoint it is not easy to envision a path by which they could develop.

An eye, for example, is a complex organ with interdependent, complex parts. If sightedness developed from unsightedness, how would the transitional forms be useful enough for the organism to survive? The question can rightly be asked, what good is 5% of an eye? The marvelously complex and specialized structures such as wings, lungs, hearts and brains are extremely difficult to explain. They point to design, design to purpose, and purpose to intelligence.

This basic concern has never been resolved. Indeed, the deeper the investigation, the more apparent is the case for design, and the more pressing the problem. It is a fatal flaw for the concept of simply natural evolution, and it is simple enough for all to grasp. The case for faith in God is straightforward and reasonable. Nevertheless, let us examine the basic premises of the theory of evolution.

**Three Foundation Premises**

The theory of evolution as outlined in *The Origin of Specie*s is based on three basic propositions:

1) Species are NOT immutable. The method by which diversity of life is derived from a common ancestor is called "descent with modification."

2) Evolutionary processes can account for all or nearly all of the diversity of life because all living things descended from a very small group of ancestors — possibly a single microscopic cell.

3) This incredible process is guided by "natural selection" or "survival of the fittest." Vast amounts of time are required for this process to work.

The first of these is only marginally true. Separate species are sometimes defined as those groups which cannot interbreed, and speciation of this kind can be demonstrated. For example the herring gull and the lesser black backed gull are two distinct bird species in Europe, but as you trace one westward and the other eastward, you find a continuum of changes linked to an intermediate species in Eastern Siberia. All the varieties can interbreed except the two ends which converge in Europe (*Evolution: A Theory in Crisis,* page 82). But there are no examples of one kind of species (like a bird) gradually phasing into another type of species (like a lizard).

The second is purely hypothetical (and is the whole point at issue).

The third has received a lot of publicity. Let's examine it further.

**Natural Selection**

Surprisingly, this proposition did not obtain any direct experimental support until nearly a century had passed. But in the 1950s an Oxford zoologist named Bernard Kettlewell provided some experimental evidence that natural selection does function in nature, through his now famous "peppered moth" experiment.

This moth comes in dark and light varieties. In the experiment, Kettlewell released approximately equal amounts of both into an unpolluted forest, later recapturing 34 dark and 62 light moths. Evidently the light moths survived better since their light tones blended better against the light-colored trees and lichen covered rocks, while the darker ones, more visible by contrast, were presumably detected and eaten by birds in greater numbers. The experiment was repeated in another forest, one darkened by industrial pollution, and showed the anticipated opposite results. One of his colleagues, Professor Niko Tinbergen, gathered more confirming information, filming birds capturing moths selectively against light and darkened tree trunks. This was evidence in support of Darwin's supposition that such natural selection actually does operate in nature.

However, this force has no intrinsic creative power. It is merely a sieve, a selector, which at the most is able to produce a statistical preference for the survivability of certain traits over others. There inheres in it no specific ability to produce change, merely to select among the changes otherwise produced. Nor has it any intrinsic power to even select those features which will advance the complexity, sophistication or value of the creature

involved. In fact, natural selection preserves but one quality — survivability — and is thus without power to produce an upward bias in the progressing variety of life.

Just about any characteristic can be either advantageous or disadvantageous, depending on the surrounding environmental conditions. Does it seem that the ability to fly is obviously an advantage? Darwin hypothesized that natural selection might have caused beetles on Madeira to lose the ability to fly because beetles capable of flight tended to be blown out to sea. The large human brain requires a large skull which causes discomfort and danger to the mother in childbirth. We assume that our brain size is advantageous because civilized humans dominate the planet, but it is far from obvious that the large brain was a net advantage in the circumstances in which it supposedly evolved. "Among primates in general, those with the largest brains are not the ones least in danger of extinction" (Darwin on Trial, page 21).

Natural selection is sometimes termed "survival of the fittest." But by definition, the "fittest" means only those most prone to survive as a species (like cockroaches). Thus George Gaylord Simpson (1964) said "Natural selection favors fitness only if you define fitness as leaving more descendants."

**Natural Selection — a Tautology**

A tautology is a way of saying the same thing twice. "The phrase 'survival of the fittest' is something of a tautology. So are most mathematical theorems. There is no harm in saying the same truth in two different ways" (J.B.S. Haldane, 1935, from *Darwin on Trial,* page 20). However, there is harm in supposing that a tautology explains something which it does not. If we wish to know how a fish can become a man, it is not instructive to be told that the organisms that leave the most offspring are the ones that leave the most offspring.

Some statements on behalf of evolution and the process of natural selection reduce to something essentially equivalent. The following deductive argument is found in the British Natural History Museum's handbook on evolution, by Colin Patterson.

1) All organisms must reproduce to survive.

2) All organisms exhibit hereditary variations.

3) Hereditary variables differ in their effect on reproduction.

4) Therefore, variations with favorable effects on reproduction will succeed and those with unfavorable effects will fail and the organism will change.

This is nothing more than the tautology discussed above, with the added words "and the organism will change." Without this addition there is nothing here to support evolution. However, the assertion is added without support. Actually natural selection may be more responsible for stability than for change. As Philip Johnson observes,

"The range of hereditary variations may be narrow, and the variations which survive may be just favorable enough to keep the species as it is. Possibly the species would change a great deal more (in the direction of eventual extinction) if the least favored individuals most often succeeded in reproducing their kind. That the effect of natural selection may be to keep a species from changing is not merely a theoretical possibility. [In fact] ... the prevailing characteristic of fossil species is stasis — the absence of change. There are numerous "living fossils" which are much the same today as they were millions of years ago, at least as far as we can determine." *(Darwin on Trial,* page 23.)

In fact there is no evidence that the selective capacity of "natural selection" accounts for anything like new organs, body types or anatomical abilities — all indispensably necessary to allow the hypothesized natural, upward progress of living things.

**Mutation —A Proposed Cause of Change**

When Darwin proposed his theory, the laws of genetics were not understood and he supposed natural variety from genetic breeding would supply the diversity from which natural selection would select. But as the science of biology progressed, it became clear that genetic variety could not produce fundamental changes of kind, and this proposition was dropped.

Mutations were next considered the responsible agent of change. The problem, of course, is that the effect of mutations on organisms is generally destructive and debilitating. The vast majority of mutations have a negative effect on the organism and decrease its survivability. But, as no other agent of change is at hand, in one form or another it is still the agent of choice.

Mutation provides the mechanism for permanent changes beyond the genetic limitations of a given organism. Darwin stated emphatically that massive, simultaneous mutation would amount to a miracle and as such would have no place in his theory. He was convinced that gradual changes over long periods of time were necessary for evolution to work. Interestingly, the latest theories regarding evolution specify just the opposite — that in relatively brief periods of time, explosions of diversity through massive mutations are the only hope left consistent with the facts. In large part, this is because of ...

**The Fossil Record**

In theory, according to Darwinian evolution, there should be a continuum of life all about us representing every conceivable kind of intermediate between various kinds. Indeed, if observations could produce such a continuum, the evidence for transitional development would be greatly strengthened. But as it is, nature is clumped in discrete blocks, discrete kinds, more like separate bushes with diversity than one continuous tree of life.

Evolutionists reply that the present state is due to widespread extinctions of the various intervening steps which connected the various kinds long ago. If so, should not these past forms be well represented in the fossil record?

But the fossil record does not show the millions of tiny transitional life forms which Darwin's theory postulated must have existed. Darwin himself admitted "the case at present must remain inexplicable and may be truly argued as a valid argument against the views here entertained." (*The Origin of Species,* page 332, cited from *Evolution: A Theory in Crisis,* page 188.) He supposed another 100 years of digging would supply the gaps. It hasn't. Evolutionists have searched diligently for the dramatic "missing links" between all the variety of basic kinds. In spite of the incredible effort, talent and money expended in this search, only a few examples of possible transition species can be identified.

The link between fish and amphibians had to be given up when its most hopeful example, the coelacanth, thought to be extinct for millions of years, was caught by fishermen in the Indian Ocean in 1938. This fish, which has skeletal "leg buds," turned out to be 100% fishlike in its internal soft tissue structures and has no amphibian tendencies in its behavior. There are no candidates to be found for the link between amphibians and reptiles.

The reptile-mammal link has one example of a fossilized creature that is essentially a reptile, but with a very mammal-like jaw structure, but no other similarities can be found.

The strongest "missing link" is the reptile-bird link. The famous Archeopteryx, a dinosaur flying reptile, may be considered a precursor to a bird, but no mechanism for the complex and extensive changes between Archeopteryx and modern birds have been found to be plausible.

But how many transition forms should we expect to find? "Of the 329 living families of terrestrial vertebrates 261 or 79.1% have been found as fossils and, when birds (which are poorly fossilized) are excluded, the percentage rises to 87.8%" (Evolution: A Theory in Crisis, page 189). Would not this imply that a similar proportion of extinct transitions should be found?

As Darwin admitted, "That the geological record is imperfect all will admit; but that it is imperfect to the degree required by our theory, few will be inclined to admit." (*The Origin of Species*, page 464, from *Evolution: A Theory in Crisis,* page 191.)

The fact that the fossil record did not contain the anticipated multitudes of transitional life forms Darwin's theory implied was to them evidence that the fossil record was incomplete. It was a bad excuse then. Now, after 139 years of digging have produced literally tons of fossil data with no substantial evidence of transitional forms, it is a disaster. Indeed, groups of organisms appear suddenly in the fossil record and are distinct from other groups from their earliest appearance.

**Embryonic Similarities**

Another popular argument for evolution points to similarities between the embryonic forms of similar organisms. The assumption is that the developmental sequence from

fertilized egg to viable organism "replays" the evolutionary development of that organism. But closer examination of this phenomenon by embryologists has disproved this idea. In fact, observed similarities in bone structure of mammals, for example, demonstrate that even though a human, a whale, and a bat all have five digit appendages, these appendages develop from different cell layers, pass through different developmental steps in differing lengths of time, and form a hand, a fin and a wing respectively, each uniquely suited to its owner and used for very different functions. The differences are inconsistent with a progressive development one from another. But the similarities evidence the plan of a single Creator, much as three very different buildings can be identified as "Frank Lloyd Wright buildings" by certain "signature" similarities.

**Molecular Evidence**

When Darwin published his theory, molecular science was in its earliest stages of development. He knew nothing about genes and chromosomes, much less the complex protein chain matrixes people are generally familiar with today. If evolution actually occurred, changes would have to take place at the molecular level first, and there should be molecular evidence to support it.

Unfortunately for Darwin's theory, the forces of natural selection which it depended upon to effect change, at the molecular level act primarily to prevent change. The molecular evidence strongly supports the fossil evidence that groups of organisms appeared suddenly and within a relatively short period of time. Therefore the molecular evidence fails to confirm either the existence of a common ancestor or the concept of slow, gradual change.

Several books have been published in the last few years which detail the fascinating story of current molecular research and its impact on evolutionary theory. One is Darwin's Black Box, *The Biochemical Challenge to Evolution*, by Michael J. Behe (1996). He focuses on the issue of "irreducible complexity" — systems which require the interactivity of many disparate but mutually necessary components. In detail he explains the complexities of such things as cellular motion (chapter 3), the incredible series of reactions involved in blood clotting (chapter 4), the imponderables of organizing the proper supplies and shipments of necessary materials within a living cell (chapter 5), the amazing ingenuity of the immune system (chapter 6), and the problems the cell faces in producing just one of the four primary components of DNA. (Even our superlatives do not adequately express the difficulties.) None of these cases, or the hundreds of other complex systems intrinsic to life, have been explained in the evolutionary hypothesis. Things were much simpler in Darwin's day when protoplasm was just a milky blob.

In summary, the theory of evolution and its impact on modern society is in the throes of a deadly conflict. The truth cannot be hidden much longer. Even honest skeptics in the scientific community are beginning to sit up and take notice that evolution has not been handled objectively. The evidence is piling up to reconsider the traditional explanations of evolution as a fact in the light of reason and impartiality. We may be sure that scientific evidence will reveal the divine intelligence behind creation before too long.

When the God of the Bible is once again recognized as the author of natural laws and of life itself, it will open the door for recognition of his plan for the perfection of the human creation and the earth itself.

# Does Scientific Evidence Point to a Creator?

***O LORD my God, thou art very great ... who coverest thyself with light as with a garment: who stretchest out the heavens like a curtain. — Psalms 104:1, 2***

*Andy Weeks*

Is it proper for Christians to spend their time understanding scientific discoveries about Creation? David hints at a positive answer to this question in Psalm 19:1, "The heavens declare the glory of God!" There is much to learn about our Father's meticulous care in providing us a place to live within this universe. The exciting part is that the facts concerning our dwelling place tell us of God's glory in many different ways. The writers of the Bible spent much time pondering nature and how it shows God's mighty power and glory. Consider the following scriptures:

"The heavens declare the glory of God; the skies proclaim the work of his hands. Day after day they pour forth speech; night after night they display knowledge. There is no speech or language where their voice is not heard. Their voice goes out into all the earth, their words to the ends of the world." — Psalm 19:1–4, NIV

"Ask the animals, and they will teach you, or the birds of the air, and they will tell you; or speak to the earth, and it will teach you, or let the fish of the sea inform you." — Job 12:7, 8, NIV

However, it is easy to be intimidated by scientific claims. Many Christians feel this way because of "conclusions" often trumpeted loudly which are contrary to belief in a creator. But we do not have to shut our ears to firm evidence. More and more, the facts surfacing from astronomy and the hard sciences are demonstrating a profound and delicate design in our universe, which speaks of an intelligent designer.

Even computer simulations about how the universe and our solar system were formed point to intricate fine-tuning, which is inducing many scientists to speculate about the existence of a creator. The following famous quote from a self-proclaimed agnostic astronomer is to the point.

"For the scientist who has lived his dream by faith in the power of reason, the story ends like a bad dream. He has scaled the mountains of ignorance; he is about to conquer the highest peak; as he pulls himself over the final rock, he is greeted by a band of theologians who have been sitting there for centuries." — *God and the Astronomers*, Robert Jastrow, W. W. Norton & Company, 2nd Edition, p. 107.

## Chance or Design?

Almost all scientists have now discarded the idea prevailing earlier this century, that the universe did not have a beginning. Since the late 1920s, when Edwin Hubble discovered that the galaxies of our universe are generally racing away from each other, the notion of an expanding universe has grown in popularity and is now the accepted wisdom. And this concept, mentally run backward in time, implies the universe had a beginning. But this conclusion forces the question: How did the universe begin?

Many people presume we exist by the good fortunes of chance. Some even postulate that our universe is but one of billions which are spawned and absorbed in a sea of bubble universes. The motivation for such a theory is to explain how at least one universe (ours) is fortunate enough to have conditions so finely tuned as to allow life to develop and survive. Quantum mechanics permits such theories because it allows that a universe can pop into existence at any given moment. But as such a phenomenon can never be verified through observation or experiment, it points to the weakness of the arguments against a creator.

## The Evidence of Design

If the Bible is true, then time and evidence are on God's side. The more "universal" facts are uncovered, the more they will point to evidence for the God of the Bible. Many brilliant minds, even agnostics and athetists, have pondered the implications of the sensitive balance of physical constants which allow life as we know it.

"The laws of science, as we know them at the present, contain many fundamental numbers, like the size of the electric charge of the electron and the ratio of the masses of the proton to the electron. ... The remarkable fact is that the values of these numbers seem to have been very finely adjusted to make possible the development for life." — Stephen Hawking, theoretical physicist, atheist.

"A common sense interpretation of the facts suggests that a super-intellect has monkeyed with physics, as well as with chemistry and biology, and that there are no blind forces worth speaking about in nature. The numbers one calculates from the facts seem to me so overwhelming as to put this conclusion almost beyond question." — Fred Hoyle, astrophysicist.

"The scientist is possessed by the sense of universal causation ... His religious feeling takes the form of rapturous amazement at the harmony of natural law, which reveals the intelligence of such superiority that, compared with it, systematic thinking and acting of human beings is an utterly insignificant reflection." — Albert Einstein, theoretical physicist, agnostic.

**Parameters Worth Pondering**

What shines out like the sun at noonday to us who believe is the tender, thoughtful care that God has taken to make us a place possible to call home. You may be amazed at the inflexible intricacy of many parameters of physics it takes to have a world that is habitable for human life. Here are just a few:

• **Expansion rate of the Universe —** If the expansion rate of the universe had been smaller by just one part in 1055, the universe would have collapsed back on itself before it reached its present state. If larger, galaxies would not clump together since the effects of gravity would be overwhelmed. (The heavy elements necessary to life would not be available without galaxies.) (*The Creator and the Cosmos*, Hugh Ross, pp. 112, 113.)

• **Electromagnetic Force —** The Electromagnetic Force determines molecular bonding. If this force were just slightly stronger, the atoms would not release electrons. If just slightly weaker, atoms would not hold on to electrons at all. We can conclude that unless this force is delicately tuned, chemical bonding for life chemistry could never take place. (Source as above.)

• **The Strong Nuclear Force —** The strong nuclear force governs the degree to which protons and neutrons stick together in atomic nuclei. If .3% stronger, all protons and neutrons would never break apart and there could be no hydrogen, and thus no stars. If 2% weaker, protons and neutrons would not stick together, leaving us with only helium in the universe. Once again star formation would be impossible. (Source as above.)

• **The Small Excess of Matter over Antimatter —** "If there had not been a small excess of electrons over anti-electrons, and quarks over anti-quarks, then ordinary particles would be virtually absent in the universe today. It is this early excess of matter over antimatter, estimated to be ... one part in about 1010, that survived to form light atomic nuclei three minutes later [after the Hot Big Bang], ... [and] after a million years [formed] atoms, and later ... cooked [into] heavier elements in stars [which provided] the material from which life would arise." — *Scientific American*, "Life in the Universe," Stephen Weinberg, October 1994, p. 45.

**New Concerns Being Discovered**

What would have happened if the matter from the creation event had been a little lumpier or a little smoother? "A ten times lumpier 'soup' would have formed a universe with dense super-massive galaxies. In such galaxies, Tegmark and Rees found, frequently stellar encounters would disrupt planetary systems before life could evolve." — *Sky and Telescope*, February 1998, p. 20.

Concerning the importance of having Jupiter in our solar system: "The near circular orbit of our largest planet, Jupiter, actually promotes the stability of circular orbits among the other eight planets, simulations have found. If Jupiter were in an eccentric orbit, Earth and Mars would have been flung out of the solar system long ago ... The existence of

intelligent life may depend on Jupiter and Earth being in mutually stable orbits." — Sky and Telescope, March 1998, p. 37.

Concerning the importance of our moon: "The moon kept the earth's rotation relatively stable. Studies have shown that without the moon, the tilt of Earth's axis would vary chaotically between 0 and 85 degrees ... their report in the September 1997 Icarus reveals that if the Earth's axis tipped ... evolution of an ecosystem would face catastrophic changes every few tens of millions of years. Life would repeatedly have to reassert itself ... These results seem to provide additional constraints on the likelihood of life elsewhere in the universe. It could be that planets need an axis-calming satellite to ensure climatic stability." — *Sky and Telescope,* March 1998, p. 21.

**Summary for Fine Tuning**

Astronomer Hugh Ross, in his book The Creator and the Cosmos (pp. 143, 144) has compiled an extensive list of parameters that are needed to have an habitable planet. He lists 41 factors whose sensitive adjustment is necessary for life (and thus humans) to exist at all. By lumping them together, he concludes that the probability of all 41 factors occurring together would be 1051 (10 with 51 zeros after it). Science is showing us more clearly what we already believe by faith about our creator: He is an awesome, caring God who took great measures to provide us a place to live. Praise his holy name!

Earth's Great Environmental Disaster

# The First World, the Flood, and Current Scientific Consensus

***The same day were all the fountains of the great deep broken up, and the windows of heaven were opened. — Genesis 7:11***

*Richard Doctor*

God is the author of the book of revealed scripture and the book of nature. What other author is so misunderstood that two key books in his collected works are forced to stand on separate library shelves?

Frequently, the two hostile communities specializing in the exclusive study of one or the other of these books miss no opportunity to speak disparagingly about the other book and its special students. You might easily think these are rival works of mutually hostile authors.

Happily, a welcome thaw is occurring in the relations between science and the Bible. Nobel Prize winner Charles Townes, discoverer of the laser, recently summed it up this way: "Science wants to know the mechanism of the universe, religion the meaning. The two cannot be separated." (Science, August 15, 1997) Today scientific studies as diverse as cutting-edge supercomputer simulations of ancient climates, studies of ocean sediment cores, and physically grueling field research on Greenland's inhospitable ice, all testify in harmony with the eye-witness account of the greatest environmental disaster man has ever witnessed — the deluge of Noah. These studies are still in progress, hence, this is a progress report. Without doubt there are still surprises ahead as our scientific understanding grows.

**The Deluge — A One Act Cataclysm in Three Stages**

What was the world like before the flood? The evidence points to an ice-age world with a very comfortable temperate climate in the middle east. An ice-age would not immediately come to mind, but as you will see, the evidence for this is very strong. Settled farming communities were developing. This mini-ice-age is known by geologists as the Younger Dryas.

Imagine the earth as it was then, slowly waking from the icy grip of the most recent and short-lived glacial advance. In our mental vision, let us stand then where my home stands now outside of Chicago. The familiar landmarks of this generally flat region then lay under the frigid waters of a much larger lake. Waters lap an icy shoreline that does not thaw through summer. Glacial Lake Chicago stands almost 60 feet over the level of modern Lake Michigan, held back from flooding the lowlands by thick ice dams.

Extensive glacial lakes like this are typical throughout the world. Occasionally, wooly mammoths appear near the shore. Later, these high lake levels will be critical to the catastrophic events of the deluge.

Moving eastward the North American coastline appears unfamiliar, extending tens to hundreds of miles beyond the current shorelines because so much water is trapped in ice sheets that sea levels are lower. In Europe, we might pause to visit the French Riviera, and find ourselves on a canyon ridge with a spectacular overlook of lush green valleys with grazing herds of bison, wild cattle, and horses sprawling the basin of the as yet unborn Mediterranean Sea. All these areas are very sparsely populated.

We continue eastward to the population centers developing along the Tigris and Euphrates rivers. We pause in the reed marshes that will later be submerged by the Persian Gulf — this should be near the pre-deluge home of Noah. The sky is hazy. The haze comes from airborne dust and fine sand carried across continents in intense jet streams. So much water is locked in ice, that for millennia there has been a world-wide disruption of rain patterns. On the marsh it is a pleasant spring evening in early May. A hunting party settled by their camp fire suddenly becomes animated. Something is wrong. Alarmed flocks of migratory waterfowl rise from their newly built nests to fly about in confusion. Curtains of glowing purple-blue light falling from the heavens directly overhead heighten the uneasiness. Seen in modern times only in northern latitudes, the Aurora Borealis is appearing in the wrong zone. Since we are carrying a compass, we are surprised that it no longer works. Within hours this heavenly light show is hidden by storm clouds, unfamiliar even in the memories of the elders. No rain has fallen in these inhabited zones for nearly two millennia. After a week, the gathering clouds block all sunlight. Then the rains begin.

We are witnesses to a phenomenon not seen since the deluge. Earth's protective magnetic shield, normally only a few degrees off the earth's axis of rotation, has buckled and shifted, locally ceasing in some zones. This first stage of the cataclysm — the Gothenburg geomagnetic excursion — is destined to set into motion a sequence of events that will reorder planetary weather patterns.

Movement over land under the best of conditions is about ten miles per day. As the unfamiliar rains begin, travel could not be worse. There is no time for the several days travel to higher ground, and all the winter provisions are used up. Nor is higher ground any safer. Where the flooding ceases, freezing rain, snow, and avalanches trap and doom the hapless caught in the mountain passes.

Those on the canyon overlooks are saved from their fate for a few days longer. As the rains continue unabated, the next stage of the cataclysm unfolds. A surging wall of water stretching as far as the eye can see, comes sweeping across the canyon rims. The ice dams holding back glacial lakes throughout the world have swollen and burst from the rain.

The third and final stage of the cataclysm soon follows.

Bitterly cold strong winds begin to blow. Waters surging in from the oceans sweep back inland over the already flooded coasts. In arctic regions, drowned wooly mammoths who a short time before feasted on abundant spring flowers, now are surrounded by freezing slush. While the ice-age climate now has ended for the rest of the earth, the mammoths are locked in ice where before there was none. Far in the future, their deep frozen flesh will stay fresh enough to be eaten as a delicacy by the wealthy at exclusive Victorian-era restaurants.

**No Rain before the Deluge**

Geophysical evidence supports the biblical account that for the midlatitudes, "there went up a mist from the earth and watered the whole face of the ground" (Genesis 2:6). Mayewski of the University of New Hampshire, writing in the flagship journal of the American Association for the Advancement of Science, reports on ancient rain patterns as evidenced by dust loadings in ice-cores *(Science*, July 9, 1993). When there is heavy precipitation, dust washes out of the atmosphere before reaching the polar ice. When there is light precipitation, dust stays aloft and is carried to the ice sheets with the snow. Low precipitation patterns are in marked evidence during the entire period of the Younger Dryas. This is the era of "mist from the earth." These patterns radically change to rain patterns at the abrupt end of the Younger Dryas.

**Stage 1 —A Magnetic Excursion Begins the Rain**

What switched the weather patterns from no-rain to high-rain conditions? The earth's magnetic field may be the key. This field serves as a giant "windshield" in space protecting us from the charged particles making up the solar "wind." Earth's magnetism deflects some of these "ions" while trapping others in the Van Allen radiation belt. During a magnetic "excursion," the ions, now free of their magnetic trap should cascade into the atmosphere and become nuclei for rain drops — as happens all the time today.

In Nature, the pre-eminent European scientific journal, Fairbridge directly linked world-wide rain resulting from the Gothenburg Geomagnetic Excursion with markers of world-wide climate change and flood legends (Nature, February 3, 1977). Although follow-up "Letters to editor" were critical of the speculation on world-wide precipitation, Rossignol-Strick, of the National Museum of Natural History, Paris, follows with a report entitling her article "After the Deluge: Mediterranean Stagnation." Speaking of layers of organic-rich mud, the remains of massive fauna and flora kills resulting from "the start of a global event — a very heavy precipitation" (*Nature,* January 14, 1982).

The next stage of the deluge, brought about by the heavy rains worsens the catastrophe.

**Stage 2 — Evidence of Superfloods from Glacial Lakes**

The scientific community's shift to agree that the biblical flood actually could have taken place begins in earnest when University of Miami paleoclimatolgist Casare Emiliani points to strong geophysical evidence for rapid ice-melting at the end of the Younger

Dryas (Science, September 26, 1975). He holds that the evidence is consistent with the deluge accounts preserved throughout diverse nations and peoples of the earth. Based on carbon-14 dating and the claims of Plato that the flood took place 9,000 years before his day, Emiliani gives a date which is highly inconsistent with Genesis, but consistent with Plato. He holds that the flood took place 11,500 years ago. He observes that the cultural memory of this great geophysical disaster agrees with the best scientific data. Popularized reports on this work read, "In almost every culture ... emerge strikingly similar tales of a great flood that swept away emerging civilizations and changed the face of the earth. New evidence gathered from sea floor cores ... confirms the existence of such a universal deluge." *(Science News*, October 4, 1975)

Prof. Dansgaard, University of Copenhagen, also agrees with this, writing that "the Younger Dryas ended abruptly ... [in] this epoch defining event" (*Nature*, June 15, 1989). Finding support for an earlier date of 7,700 years before present for ending the Younger Dryas, Strief in the Netherlands underscores the enormity of the event concluding that "floodwaters" show evidence of a 24 foot rise in ocean levels which occurred either "within 505 years, or instantaneously" (Nature, November 2, 1989).

More researchers join the quest. Baker of the University of Arizona, reports on "superflooding" evidence from his field work in Siberia (*Science*, January 15, 1993). He concludes that, "Cataclysmic flooding ... [and] landforms of flood origin resulting from the ice-dammed lake failures ... [are] the largest known terrestrial discharge of freshwater ... these seem to have been earth's greatest floods." Deep in the article he explains that the superflooding was not noticed earlier because no one was looking for it!

**Stage 3 — The Freeze**

The seven seas are marvelously connected by a solar-powered deep-sea conveyor belt. Starting near Nigeria, warm tropical waters — heavy with salt left behind by evaporation — descend. They are carried counter-clockwise towards Iceland by an undersea river twenty times greater in volume than all the surface rivers. Briefly they surface near Iceland. The tropical waters steam off into the dry frigid air, warming northern Europe with the power equivalent of one million 600-megawatt electric power stations. This evaporation leaves behind even saltier and colder waters that descend again near the straits of Denmark in an undersea waterfall four times taller than Angel Falls (*Scientific American*, "Giant Ocean Cataracts," February, 1989). From here their course takes them through every ocean basin on earth until they return to Nigeria.

The initial rain of the deluge led to the overflow and collapse of the ice-dams restraining glacial lakes throughout the world — including Lake Chicago. The result was superflooding. World renowned climatologist Wallace Broeker, of Columbia University, reports that flood waters from Lake Chicago and the other great lakes rushed down the St. Lawrence Seaway to combine with similar superfloods rushing down the Straits of Denmark. Thousands of cubic miles of ice-cold fresh water spread out in a sheet over the surface of the saltier North Atlantic. This shut down the ocean heat conveyor belt and

brought about the final catastrophic episode ending the Younger Dryas (*Nature*, January 31, 1997).

Drawing together the threads of this tapestry, Street-Perrot and her husband find that the early May temperatures immediately went to arctic conditions — on average the northern latitude temperature plunged 25 F degrees (*Nature*, February 15, 1990). Isotope specialist James White of the University of Colorado said, "I am completely in awe of the scale of the change and its speed" (*Science*, June 14, 1996) — a speed which froze mammoths with spring flowers in their mouths.

Are these immense conveyor-belt waters "the fountains of the great deep" (Genesis 7:11, 8:2)? This appeals to me more than the thought that these "fountains" sprang from the face of the earth for three reasons. First, "the great deep" always refers to the ocean. Second, when subterranean waters do on occasion erupt from the earth, they leave behind a conical structure that looks like a giant ant hill (see photo above). Since we see no evidence for such pox-like scars on the earth's face, this could not have happened. Most importantly, the action of this ocean conveyor belt is now recognized as the final devastating blow of the deluge.

The geophysical community has yet to focus on "the breaking forth" described in Genesis 7:11. However, three mechanisms may be important. These include tsunamis, linked to earthquakes resulting from the rapid shifts in weight from superflooding; seiches (broad oscillating movements) caused by the atmospheric disturbance; and buckling and surging of the disrupted deep-ocean heat conveyor belt. We will need to wait and see what develops.

**Concluding Thoughts**

What shall we say? The mainline scientific community now finds itself believing in exactly the kind of catastrophe to which the Genesis account bears an eye-witness record, and the scientific evidence appears to be spectacular. Isn't that just like God? Science asks for theories that can be tested, then it tests them rigorously. As both a Christian and a researcher I am comfortable with this.

A verse by verse study in Job 38

# Jehovah, the Omniscient

**God is greater than man. — Job 33:12**

Nature is awe-inspiring. As we view the wonders of earth, from the stark interplay of colors in the Grand Canyon of the Colorado to the towering snow-capped peaks of the Himalayas, all we can do is respond with a stream of "Ooh's" and "Ah's." Who has not thrilled with the shepherd psalmist as he sang "When I consider thy heavens ... What is man, that thou art mindful of him" (Psalms 8:3, 4)? Or again, "The heavens declare the glory of God and the firmament showeth forth his handiwork" (Psalms 19:1).

Nature is intimidating. Not only its sheer size, but the intricate balancing necessary to make it all work in soundless harmony challenges the minds of even the brightest scientists. Billions of dollars in research and countless hours in sophisticated laboratories have only scratched the surface of the wonders of the universe.

It is to these wonders and the wisdom that went into their planning that Jehovah refers when he enters the discussion between Job and his companions.

**The Challenge--Verses 1 to 3**

*Then the LORD answered Job out of the whirlwind, and said, Who is this that darkeneth counsel by words without knowledge? Gird up now thy loins like a man; for I will demand of thee, and answer thou me.*

The address of God begins with a ringing rebuke. It is noteworthy that this rebuke is not addressed to Elihu, the speaker whom God interrupts from the whirlwind, nor to the three who Job terms "miserable comforters" (16:2), but to Job. The book of Job opens by describing him as "perfect and upright" and it closes with the commendation that he spoke of God "the thing that is right" (42:7). Yet he is the one singled out for the strong criticism: "Who is this that darkeneth counsel by words without wisdom?"

One of the tools of the Adversary is the wedge, where one extreme position begets the opposite. This is illustrated well in the book of Job. Job's early professions of innocence, antagonized by the well-meant accusations of his three friends, degenerate into the self-righteousness which the young man Elihu cites (33:8–13). It is this self-righteousness which God reproves. Jehovah does this by enumerating the wonders of natural creation and challenging Job to answer how they were accomplished.

It is significant that Jehovah speaks "out of the whirlwind." This whirlwind is the great storm from the south that Elihu notices approaching and describes in the preceding two chapters. In the larger symbolic picture of Job, this storm probably refers to the prophetic event known as "the time of trouble" (Daniel 12:1), when man will have reached his

extremity and Jehovah will manifest to all that he is indeed the Almighty, the Creator of heaven and earth. In microcosm, the same is true of each individual of the race — it is only when he reaches the extremity in his personal "whirlwind" that he becomes open to the voice of God.

In the verses that follow, God shows his wisdom in seven distinct areas of creation: 1. the earth itself (verses 4–7); 2. the seas (verses 8–18); 3. the ways of light (verses 19–21); 4. the provision of water resources (verses 22–30); 5. the stars (verses 31–33); 6. the control of climate (verses 34–38); 7. the animal creation (38:39 through chapter 41).

**Foundations of the Earth--Verses 4 to 7**

*Where wast thou when I laid the foundations of the earth? declare, if thou hast understanding. Who hath laid the measures thereof, if thou knowest? or who hath stretched the line upon it? Whereupon are the foundations thereof fastened? or who laid the corner stone thereof; When the morning stars sang together, and all the sons of God shouted for joy?*

The language in this passage is architectural. We see the master planner deliberating over his drafting board, determining precise sizes for his project. He is building a home — a home for not only the human race but for countless other species of flora and fauna. It would be a living home, constantly growing and replenishing itself. As scripturally foretold, the earth was made to abide "for ever" (Ecclesiastes 1:4).

Much thought would need to be given to its size and the effect of that size on the gravitational pull its inhabitants could withstand. Its size would determine its atmosphere. The effect of a satellite, or moon, upon its water surfaces was considered. An appropriate and delicate balance must be maintained between the oceans as a reservoir and the arable land surfaces, including provisions for growth through volcanic, glacial and earthquake activity as the subterranean tectonic plates shifted.

The earth is not a solid sphere. Much of the interior is molten and fluid. Stability for the continental land surfaces is attained by giant rock massifs penetrating far below the earth’s surface. Prof. J. W. Gregory locates seven of these, one each below North and South America, Sweden, Siberia, India, Africa, and Australia (*Encyclopedia of Modern Knowledge,* "The Making of the Earth," pp. 192–3). Another scientist writes of these rock pedestals, "These oldest rocks — that form the basement of continental land masses — often cover large areas, and are spoken of as ‘massifs,’ ‘coigns,’ or ‘shields.’ ... We are here face to face with ... the very floor of the continent, a foundation ‘massif‘ on which the newer sediments have been built during the succeeding geological periods. ... The sediments, which at first were soft, when subjected to crush and super-heated conditions of a later age, became crystalline, and passed into fusion. Granites formed in the folds of the mountain ranges." (*The Building of Australia*, Part I, Prof. W. Howchin, D.Sc., p. 32.)

The Hebrew word translated "foundations" in verse six is different than the one used in verse four. The latter would be better translated "pedestal," "pillar," or "footing." It is

most frequently translated "socket" and is so used for the sockets of the tabernacle in the wilderness. The word "fastened," in the original, has the concept of being sunk deeply into a solid footing. These terms are very appropriate for the size and depth of these massive rock pedestals which form the foundations for the continental land masses.

Verse seven shows that this part of the creative work was some time after the making of the angelic host, which suggests that these innumerable spiritual beings may have been employed in the building process, not only of the universe, but of the particular spot within it forthe habitation of the human race. Their "shouting together for joy" may indicate they were willingly and usefully employed in preparing the earth for human habitation.

**The Bounds of the Sea--Verses 8 to 18**

*Or who shut up the sea with doors, when it brake forth, as if it had issued out of the womb? When I made the cloud the garment thereof, and thick darkness a swaddling band for it, And brake up for it my decreed place, and set bars and doors, And said, Hitherto shalt thou come, but no further: and here shall thy proud waves be stayed? Hast thou commanded the morning since thy days; and caused the dayspring to know his place; That it might take hold of the ends of the earth, that the wicked might be shaken out of it? It is turned as clay to the seal; and they stand as a garment. And from the wicked their light is withholden, and the high arm shall be broken. Hast thou entered into the springs of the sea? or hast thou walked in the search of the depth? Have the gates of death been opened unto thee? or hast thou seen the doors of the shadow of death? Hast thou perceived the breadth of the earth? declare if thou knowest it all.*

This section calls to mind the works of the first three creative days of Genesis 1. Here God speaks of the divisions of light and darkness, of sea and cloud, and of sea and dry land. The Genesis account presumes the earth to already exist and to be in an unformed and liquid condition: "And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters" (Genesis 1:2).

In poetic language, the book of Job sees these waters erupting from below. The words are not incompatible with the waters coming from cooling vapors as the primordial globe began to be prepared for use. Sir James Jeans sees four stages in this process: (1) the earth, at first, as a gas perhaps from the sun; (2) condensing into a liquid at a very high temperature; (3) losing heat, congealing into a hot plastic mass; and (4) cooling into the present solid crust (Encyclopedia of Modern Knowledge, "The World, Whence and How," p. 14).

The Hebrew word for doors signifies a double door, such as a sluice gate. The study of volcanoes illustrates how gases thrown into space contain vast amounts of water vapor. In the case of the earth, this vapor had been "shut up" around the central core before the Creator opened the sluice gates and sent it forth as gases to later condense and fall into

pre-formed ocean beds. However, both in the heavens and upon the earth, the accumulations of water had to be carefully controlled.

Passing from the waters below to the waters above, God describes the remaining liquids surrounding the earth as "swaddling-bands." The picture is an apt one. As a new-born child is quickly swathed from head to toe, so the newly-formed earth would be encircled with cloudy vapors.

At first glance, verses twelve to fifteen appear to be almost parenthetical. The discussion turns from the seas to the distinction between light and darkness and then, in verse sixteen, back to the seas. However the two thoughts are related. It was the encircling rings of vapor which prevented the dawn from making its appearance. At first these permitted but little light to penetrate to the surface of the planet, but as they fell, ring after ring, the light became clearer, and finally on the fourth creative day the shape of the light-giving sun and stars and the reflective moon became visible.

The reference to the "placement" of the dayspring, or dawn, is not mere poetic allusion. In the formative processes of the planet, Jehovah planned the earth's axis to be tilted. This would cause the different portions of the earth's surface to be at varying angles to the sun through the year, thus producing the varying climate needed for the growing seasons. These were intended to be permanent in the utilization of the earth. "While the earth remaineth, seedtime and harvest, and cold and heat, and summer and winter, and day and night shall not cease" (Genesis 8:22).

While the allusion to the "wicked" in this passage may have some reference to the preference of evil-doers to work their nefarious trades under cover of darkness, we suggest that this is not the primary purpose here. The word here twice rendered "wicked" is the Hebrew ra, meaning calamities of every sort, including natural catastrophes. The intrusion of light on to the surface of the water-enveloped earth had the effect of purifying it.

Verse fourteen is a difficult one to interpret. One scholar has traced no less than twenty different attempts to form an interpretation. Professor Rich, in his *Second Memoir on the Ruins of Babylon* (page 59), suggests that the metaphor is of the Babylonian cylindrical seal which, when rolled over moist clay, leaves a distinct and intricate impression.

The *New International Version* phrases it the clearest. "The earth takes shape like clay under a seal; its features stand out like those of a garment." Two distinct actions are here described. The making of the image by the seal and the revelation of that image by its removal. It was the weight of the super-heated rings above the earth that formed the seal. Their gradual descent would reveal the work which they had wrought, making the features of the new planet "stand out like those of a garment."

Edward Dormath in his *A Commentary on the Book of Job* (Thomas Nelson, 1984, pp. 581, 582) notes that the clay here referred to is red in color, just as the earth in the eerie half-light then visible would have taken on a red appearance. Perhaps it is for this reason

that the paraphrased Living Bible contents itself with wording this verse, "Have you ever robed the dawn in red."

Once again, in the next verse of this section, we meet "the wicked." Once again it is a translation of the Hebrew ra. While the moral lesson is true and obvious, perhaps the verse here, as the rest of the chapter, has reference to the creative process. The beauties of the revealed earth were manifest. But the unfolding light did not illuminate the catastrophes held within these sharply modeled features. Many of the mountains would later reveal their volcanic innards and other beauty spots would later be shaken by mighty earthquakes. These were all a part of the growing process for a planet that was not due to reach its maturity for thousands of years. Living side by side with this growing process would give the human race ample opportunity to see the continuing creative processes. Often these would wreak havoc and leave thousands dead in their wake. But, in due time, even though these earth-growing forces may continue, their strong destructive arms will be broken. As increasing light reveals more and more of the purposes of these natural phenomena, they will be accurately predicted and lose their destructive threat.

Verse 16 is the only biblical use of the word translated "springs," and would be better translated "depths." It is rendered *profunda* by the *Latin Vulgate*. The challenge here is to go where man, at that time at least, could not go — the floor of the oceans. It is only in the past century that attempts, even yet imperfect, have been made to map these areas, some plummeting miles below sea level. It is in the comprehension of these that God suggests Job may find some of his answers concerning the principles of Jehovah.

In the next verse the lesson is brought home to Job. In his sorely afflicted condition he felt close to death's door. "If you do not understand the principles of life," God is saying, "how do you expect to comprehend the details of death?" With such a lack of knowledge, one cannot help but appreciate the faith of Job, who utters such profound thoughts on the subject of death and resurrection!

It will take resurrected man eternal life to fully plumb the depth of planning that has gone into the molding of planet Earth for human habitation. All fields of science will proceed from hypothetical probability to fact, and theory will grow into reality, as mankind probes the limitless breadths of information before him.

**The Source of Light--Verses 19 to 21**

*Where is the way where light dwelleth? and as for darkness, where is the place thereof, That thou shouldest take it to the bound thereof, and that thou shouldest know the paths to the house thereof? Knowest thou it, because thou wast then born? or because the number of thy days is great?*

What is the ultimate source of light? While the sun furnishes the bulk of visible light to the earth, we receive additional light from literally billions of other stars, each in its own galactic environment. Light from these distant bodies has traveled millions of years to reach our planet. Even with expensive space probes, and the Hubble telescope, scientists

are only beginning to realize the true size of the universe. Speculation as to its origin is still theoretical. The search goes on. But God knew. That is the premise of his answer to Job. Not only did he know, he planned for their placement. Nor is that placement accidental, for each celestial body exerts gravitational pressure on each other body, and thus they must be distributed so as to maintain a precise balance.

Darkness seems too simple to be remarkable. We define it merely as the absence of light. Yet darkness works its own wonders and plays an important role in the continuation of life on earth. Experiments have shown that withholding darkness for long periods of time deprives one of the necessary restorative powers of deep sleep.

God's challenge to Job is clothed in simple language. Where were you when these laws were formed? Job's answer, while unspoken, is obvious. These were all before he existed. But it is not the simple challenge of Job's brevity that makes the chapter so intriguing. It is the complete accord of this language with the works of creation as written both in Genesis and in the fossilized records of nature.

**Water Resources--Verses 22 to 30**

*Hast thou entered into the treasures of the snow? or hast thou seen the treasures of the hail, Which I have reserved against the time of trouble, against the day of battle and war? By what way is the light parted, which scattereth the east wind upon the earth? Who hath divided a watercourse for the overflowing of waters, or a way for the lightning of thunder; To cause it to rain on the earth, where no man is; on the wilderness, wherein there is no man; To satisfy the desolate and waste ground; and to cause the bud of the tender herb to spring forth? Hath the rain a father? or who hath begotten the drops of dew? Out of whose womb came the ice? and the hoary frost of heaven, who hath gendered it? The waters are hid as with a stone, and the face of the deep is frozen.*

Water is the largest single component of earth's surface. Water comes in many forms — ice, snow, hail, sleet, rain and steam to name but a few. Without refreshing rains or flowing streams for irrigation the entire earth would be a desolate wilderness. A simple yet detailed description of the water cycle is found in Ecclesiastes 1:5–7. "The sun also ariseth, and the sun goeth down, and hasteth to his place where he arose. The wind goeth toward the south, and turneth about unto the north; it whirleth about continually, and the wind returneth again according to his circuits. All the rivers run into the sea; yet the sea is not full; unto the place from whence the rivers come, thither they return again." From the evaporative action of the sun over the oceans, to the role of the winds bringing the clouds inland, to that of the heights delivering the water back to the sea by gravity, the entire weather pattern of the earth is traced in simple, yet poetic language.

A vital feature of this cycle is played by snow. Snow-capped mountains form the reservoirs, replenished by seasonal precipitation, to provide a steady flow of life-giving water to the arable lowlands. Not only do these flowing streams deliver water, but with it fresh supplies of top soil in the form of silt so that the earth continues to grow as a living planet.

Of all the forms of watery precipitation, hail is unique in that it forms no known beneficial purpose. It is the farmer's bane, repeatedly destroying valuable crops. It wreaks havoc on buildings and the populace as well. Hail was used by the Lord as one of his munitions of war against the enemies of Israel; witness the plagues of Egypt and the hail which laid low the armies of the Amorites at Gibeon (Joshua 10:11). Job is challenged to show how God, out of the same component, makes both the benevolent treasures of the snow and the malevolent armories of warfare.

Verses 25 to 28 describe the action of storms. The "watercourses" are the rain patterns formed by the interplay of high and low pressure zones. They follow sufficiently defined paths to enable today's weathermen to predict their effects with increasing accuracy days, and even weeks, in advance. Mountains play an important role in this pattern, breaking the clouds so that they drop their precious moisture at the higher elevations, to descend more gradually through the river beds to where they are needed most. As one has remarked, "All Australia needs to become extremely productive is a mountain range near the western seaboard to bring rainfall to the outback."

Two additional water forms are introduced in verse 29 — ice and frost. Frost is the plowman of the Lord. Its crystalline elements embed themselves in the ground and, by expansion, break up the clods of earth around them. Ice, covering the lakes and rivers, serves as an insulator, stabilizing the temperature of these bodies in their greater depths. It preserves an even temperature of four degrees Celsius in larger lakes and smaller ones where high winds do not raise a complicating factor (*Encyclopedia Britannica,* "Ice and Ice Formations").

**Controlling the Stars--Verses 31 to 33**

*Canst thou bind the sweet influences of Pleiades, or loose the bands of Orion? Canst thou bring forth Mazzaroth in his season? or canst thou guide Arcturus with his sons? Knowest thou the ordinances of heaven? canst thou set the dominion thereof in the earth?*

Two distinct lines of knowledge are evident in these verses — astronomic truths and symbolic interpretations. Though Orion is literally having its "bands" (the stars which form the scabbard of the hunter) loosed as the stars separate from each other, the stars of the Pleiades are bound in a cluster and move together. Meanwhile Arcturus, the shepherd constellation at the end of the handle of the Big Dipper (known originally as the large sheepfold) is guiding his sons (the handle stars, or sheep) into the fold (or pot of the dipper). None of this is apparent to the eye, and can only be detected by modern astronomical methods. Yet God expressed these matters accurately to Job.

The introduction of the word Mazzaroth adds an additional line of thought to these verses. Literally the word refers to the constellations of the Zodiac, the twelve signs. These were important in ancient time, not for astrological purposes, but for predictably marking the months and seasons. However, since these signs are designated by animal and other figures, the word is suggestive of a symbolic interpretation to the star signs. This is further bolstered by Genesis 1:14 where one of the purposes of the formation of

stars was for "signs." However, care must be exercised in using this line of interpretation to avoid anything akin to astrology, which is condemned in Scripture.

**Climactic Patterns--Verses 33 to 38**

*Knowest thou the ordinances of heaven? canst thou set the dominion thereof in the earth? Canst thou lift up thy voice to the clouds, that abundance of waters may cover thee? Canst thou send lightnings, that they may go, and say unto thee, Here we are? Who hath put wisdom in the inward parts? or who hath given understanding to the heart? Who can number the clouds in wisdom? or who can stay the bottles of heaven, When the dust groweth into hardness, and the clods cleave fast together?*

Jehovah's words now proceed from the general to the specific. Apparently he is alluding to the whirlwind, out from which Job hears his voice. The challenge here is not only Job's inability to command the weather to do his bidding, but his inability to plan the weather patterns. The beneficial aspects of lightning had not been studied until the last century when it was found that vast amounts of nitrogen are released when lightning discharges, cleansing the air and providing an essential nutrient for crop development.

Numbering the clouds may refer to understanding the amount of water which must be evaporated to properly irrigate the earth's surface. However the Hebrew word translated "clouds" apparently refers not so much to the clouds themselves as to their individual particles. The challenge to Job is whether he can know the number of particles in the clouds. These are innumerable. Only the Architect of creation knows the formulae for the composition of each cloud to provide the optimum rainfall.

The Hebrew in verse 38 is ambiguous, capable of two opposite interpretations. Most translators treat it as descriptive of the hard caked earth which needs the rains for softening. Most lexicons, on the other hand, note that the word translated "groweth" is a word used to describe the action of flowing molten metal. From this they derive the thought of hardened earth turning into mud, flowing the formerly caked earth into one moldable mass and thus making it arable. In either case, the description is that the storm is needed to prepare the earth for future growth.

In the allegorical interpretation of the book of Job, the whirlwind that is the focal point from Job 36:27 through 40 depicts the great time of trouble of Daniel 12:1. The wisdom of God in arranging weather patterns for appropriate growing seasons is equally displayed in the role of this time of trouble in preparing the earth for the blessings of the kingdom to follow. The prophet Daniel connects the time of trouble with a rapid growth of knowledge. Both are necessary for the success of the kingdom work, just as both the refreshment of rain and the harsher aspects of frost, hail, and lightning all play their parts in the natural preparation of earth for the new growing seasons ahead.

**The Brute Creation--Verses 39 to 41**

*Wilt thou hunt the prey for the lion? or fill the appetite of the young lions, When they couch in their dens, and abide in the covert to lie in wait? Who provideth for the raven his food? when his young ones cry unto God, they wander for lack of meat.*

Inasmuch as these three verses properly belong to the thirty-ninth chapter, we leave their discussion for another time. Suffice it here to mention that in the next section of God's discourse to Job, he challenges the afflicted man to understand the care given to the creation of animals, their different periods of gestation, and the thought given to providing food and a suitable habitat for each species.

The net affect of Jehovah's words provide the very motivation which the human comforters could not — the production of humility and repentance on the part of Job (Job 40:3–5; 42:1–6). It should be the same for each of us. Contemplating the greatness of God — both his omnipotence and his omniscience — should produce humility and repentance in us as well. Truly, God's ways are higher than man's ways and his thoughts than man's thoughts.

# Great and Precious Promises

***"For the eyes of the Lord run to and fro throughout the whole earth, to show himself strong in the behalf of them whose heart is perfect toward him."***
***— 2 Chronicles 16:9***

These "eyes" referred to are the Lord's influence, His power of knowing, whatever the means. ... God has means, no doubt, far superior to any of ours. ... He tells us that angels are his ministers, and that these have a charge over his people. ... But the angels of the Lord, ... have a charge more particularly over us of the Gospel Church than over any other of the Lord's people at any previous time in the world's history. The Lord is especially interested in Spiritual Israel. These angels, then, care for us, supervise our affairs, and are God's agencies or channels of communication to us as to his will; that is, communication in the sense of providences for us, causing this providence or the other providence.—R5634

* * *

***"For we are made partakers of Christ, if we hold the beginning of our confidence steadfast unto the end." — Hebrews3:14***

The spirit of discontent looks away from the heavenly manna of Divine provision, longing for other food of their own provision or of other earthly supply. The Lord grants such an opportunity of feasting to the full on what they are desiring. ... The Bible supplies the Manna of Divine Truth. The truth needs to be gathered, ground and baked, but it is God's provision. It is wholesome and nutritious, it is the very thing that we, as the people of God, need for our strengthening and perfecting. Yet some crave the flesh pots of Egypt—the world's theories. Then he allows these to come within their reach. They fill themselves with Higher Criticism and Evolutionary theories, and as a result perish as New Creatures, cease to be the people of God, cease to walk in the Master's footsteps. They are consumed by the fire, or fever, which the errors they crave produce.—R5306

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***"If God be for us who can be against us?" — Romans 8:31***

Each one of these (the "saints") may say to himself, and realize to the very bottom of his heart as applicable to himself, these wonderful words—God is for us. He may endeavor to grasp the significance of these words, but he will surely fail to get all of their wonderful meaning. It is not possible for the human mind to grasp the riches of Divine grace and love and power. We cannot comprehend them, we can merely apprehend them. If God be for us, with all of his infinite wisdom and power, it implies also that Christ is for us, for he is one with the Father; it implies also that all the angels, cherubim and seraphim, and all the heavenly powers of our knowledge and beyond our knowledge are for us—all enlisted upon our side, to do us good, to help us, to succor us in time of need, to uphold us in time of temptation, to strengthen us to do the Father's will. ... The fact

that God is "for us" and that he is making all things work together for good .. is the central thought, the essence, the strength of this message to "us." — R4214

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***"Is any thing too hard for the Lord?" — Genesis 18:14***

The spirit of God is powerful in whatever way it is applied. As an illustration of its power, the apostle points us to our Lord Jesus and his literal death, and how God's holy spirit raised Jesus from the dead in his resurrection. The thought is that this power of God thus exercised on behalf of the Lord Jesus, and which he promises so to exercise in the close of this age on behalf of all the faithful members of the body of Christ, indicates a power of God by which, if we avail ourselves of it, the new nature will find strength to conquer, to keep the flesh under, and, more than this, to make it active, energetic in the service of righteousness. — R3203

# NEWS AND VIEWS

## Pastoral Bible Institute News

### PBI Directors Elected

The members of the Pastoral Bible Institute have elected these seven individuals to serve as director for the next 12 months:

Francis Earl
Andrew Polychronis
Len Griehs
George Tabac
Carl Hagensick
Tim Thomassen
Michael Nekora

### New Booklet

We are pleased to offer the newly reprinted booklet How to Study the Bible [and have it make sense]. Our friends in Oakland County [Michigan] reset the type and upgraded the look of this booklet. It will appeal to those who are seeking to understand what the Bible really teaches. It discusses the importance of five different methods of study and also contains a synopsis of God's plan for the ultimate blessing of mankind. Those interested in obtaining this booklet should request it using the back of the insert sheet found in every issue of this magazine.

### International Convention Discourse Book

An international convention of Bible Students occurs somewhere in Europe in August of even-numbered years. The presentations are translated into the five lanugages supported at the convention and are published in books. As a courtesy to our readers, we are pleased to offer the 1998 book of discourses in English at a cost of just $5 postpaid anywhere in the world. Use the special insert sheet found in this issue to order this book. It will not be available from us after the month of September. Those attending the convention will receive the book automatically if they requested it when they made their convention reservation.

### Letters

I can't thank you enough for sending me all the hope-inspiring Bible literature. Upon its arrival I immediately sat down and "devoured" it. These are Bible truths both my late husband and I have been blessed to know for many years. But to read and re-read them again in someone else's words is so very comforting. I am having a memorial open-house

for all my family and I would like to [receive copies of] the booklet "Comfort and Consolation" for those who would like to read it.

*Brenda Hawkins, Indiana*

## Around the World

The Times of London and the Daily Mail, the leading British tabloid, carried a report from a think tank,written by 12 academics, lamenting the "sentimentalism" of modern society. It involves the substitution of appearance for reality, of wishes for facts, of self-indulgence for restraint, and of victimhood forpersonal responsibility. For example, the modern attitude toward the environment is one of "happy myths." People are unwilling to give up any of the comforts of prosperity and development that taming nature has produced. They refuse to accept the reality that raw nature has always been man's enemy. Another area is in the obsession with health. No society has ever been healthier or lives longer. Yet it talks obsessively about health. It scours the newspapers for the latest story showing that there might be some link between a certain lifestyle factor and disease. Ata time when medicine is better based in science thanever before, it spurns doctor's verdicts it does not like and rushes after some alternative medicine which will be more in keeping with fantasies about how things should be. In modern society even religion is frantic to adjust reality to appearance and indulgence. In this case it must adjust the ultimate reality, God, to a human image we feel comfortable with. He is not to be judgmental or set moral standards that are inconvenient for us. He is not to be described by immutable doctrines of truth but to be infinitely and variably malleable into our own image.

## Israel

The Absorption Ministry announced that immigration was up more than 20% in the last six months of 1997, compared to the first six months of the year, with the majority of newcomers arriving from Ukraine and Ethiopia. Some 36,000 immigrants arrived, compared to 29,000 during the first six months.

An Israeli-produced textbook was ordered by a Jordanian publisher for use in the Jordanian school system, becoming the first Israeli textbook to be used inan Arab state. Dr. Avraham Stahl, the author of "Why Don't Different People Live in Peace?" said that the book is part of a six-book series that he developed by asking fifth and sixth graders to give him questions they wanted answered.

—*Jerusalem Post*

In an interview given by PA leader Yassar Arafat on Egyptian TV on April 18, 1998, Arafat spoke of a 1974 plan to create a Palestinian state on territory ceded by Israel, and then to use that state as a base for a general Arab assault on Israel itself. When asked by the interviewer how he justified asking Palestinians to refrain from violence, Arafat then referred to the "Khudaibiya agreement" which the prophet Muhammad signed with the Koreish tribe, which was later broken when the Islamic army was strong enough to defeat

the Koreish. Arafat said, "I suggest that we maintain quiet. We respect agreements the way the prophet Muhammad and Salah a-Din respected the agreements which they signed."

*—Middle East Digest (MED), 4/29/98*

Israeli Prime Minister Netanyahu urged members of the small Jewish community in Warsaw, Poland, to immigrate to Israel. "In view of the coming year 2000, it is time for Israel to receive the last Jewish communities which still exist around the world," he said speaking in a synagogue. Before the Holocaust in WWII, some 3.5 million Jews lived in Poland. The figure has now shrunk to 4,000.

*— Deutsche Press Agentur (DPA), 4/24/98*

## Islam

Another Iran-Iraq war may be looming on the horizon—this time, unlike the 1980–88 conflict, at the instigation of Iran. Why would Iran be gearing up for war? The answer is chemical weapons. Iran is one of the very few nations in modern times that know chemical weapon attacks first-hand. In the previous war with Iraq, chemical weapons were used against Iran often. In fact, the country may have won the war if it had not been for the international tolerance of the use of Iraq's chemical weapons against it.

*—Wall Street Journal, 4/5/98*

Palestinian leader Yasser Arafat said he intends to declare an independent Palestinian state in the West Bank and Gaza in 1999. Broadcast live on the Arab Orbit satellite channel, Arafat said, "the year 1999 will attend a declaration of a Palestinian state according to the date we are committed to which should be five years after signing the peace agreements with Israel."

*—Associated Press, 4/18/98*

## Christendom

Two Catholic priests have been sentenced to death by a Rwandan court for their involvement in the genocide in the East African country four years ago. The priests are said to be the first churchmen sentenced to death by a court in the country. They were found guilty of taking part in the murder of 2,000 Tutsis whom they lured into their church in the Kibuye region to cover up their intention of delivering them into the hands of the Hutu militia. The Hutu extremists crushed the victims to death by using bulldozers to destroy the church where they had taken shelter. Pope John Paul II has called for priests and other church representatives involved in the genocide to be brought to account. More than half a million Tutsis and tens of thousands of Hutu moderates were massacred in Rwanda from the beginning of April to the end of June 1994.

*—Associated Press, 4/18/98*

Unitarianism is emerging as the religion of choice among political conservatives. As contributions to the Christian Coalition—the political arm of evangelical churches—show signs of decline, Unitarians are gaining ground. Donations to the Unitarians have more than doubled over the past decade to about $130 million annually and membership has risen by nearly 9 percent. "Unitarianism holds a strong appeal for liberal Americans who are under pressure in many other religious sects in the country," says David Hall, professor of religion at Harvard's Divinity School. Because of the organizational capability and financial resources of the church, the rise and fall of rival religions in the U.S. have enormous political implications. Political campaigns are often won and lost from church pulpits. Pundits attributed the Republican takeover of Congress a few years ago largely to efforts by the religious right. Unitarians stand out in their devotion to "political correctness." They celebrate both Easter and Passover; their charter says they believe in both Judaic and Christian values.

*—Financial Times, 3/17/98*

A poll conducted by the New York Times and CBS found that 94 percent of teenagers aged 13–17 believe in God, 51 percent trust the government to do the right thing most of the time, and 51 percent get along with their parents very well. The poll was conducted over the telephone between April 2 and April 7 and had a sampling error of plus or minus 3 percent.

*—New York Times, 4/30/98*

## Economics

George Soros, the financier and philanthropist, said he had lent the Russian government several hundred million dollars in June 1997, helping the Kremlin keep its promise to pay overdue pensions. "They were stuck. There was one period of a few days when we did make a kind of a bridge loan to enable the government to pay the arrears," Mr. Soros said. The loan from Mr. Soros appears to fit into a pattern of secret borrowing by the Russian government from western banks and financiers in moments of crisis. Shortly after helping the Russian Government bridge its short-term financing gap, Mr. Soros became a key player in the country's privatization process.

—*Financial Times, 3/5/98*

Mexican drug traffickers took advantage of the country's financial turmoil and lax regulation in 1995 and 1996 to buy a small domestic bank, government officials confirmed. It is the first admission that drug cartels succeeded in infiltrating Mexico's weak banking system. Banking supervisors said the attorney general's office was investigating the links between Grupo Financiero Anahuac and the Juarez Cartel, the most powerful criminal organization in Mexico. The devaluation of the peso, triple-digit interest rates and an avalanche of loan defaults wiped out the capital of most Mexican banks and unleashed a scramble for new partners. A dozen banks buckled under the weight of loan defaults and were placed under intervention. In spite of the growing power of Mexican drug cartels—U.S. authorities believe they now control one-third of the $50 billion dollar market for illegal drugs in the U.S.—Mexico has been unable to curtail the banking activity associated with them.

—*Financial Times, 3/17/98*

The heavy-handed police response to a Nigerian opposition march shows how precarious is the stability imposed by military ruler Sami Abacha, analysts said. The resurgence of street violence has economists worried because of the impact on the country's stock exchange at Lagos. The currency, the naira, has

kept its value, but could deteriorate should violence threats continue. Analysts say the macroeconomic stability Gen. Abacha conjured through tight spending controls looks fragile as underfunded state companies slow down and the price of crude oil slips.

—*Financial Times, 4/16/98*

On May 1, a new edition of "The Communist Manifesto" reached bookstores, coinciding with the 100th anniversary of its publication. "Laissez faire capitalism isn't yet close to winning the war of ideas," said Robert Higgs, editor of the Independent Review. Many believe socialism's critique of capitalism still has weight. "Large numbers of working people and their intellectual surrogates still feel in their bones that an unfettered free market is a jungle, that workers do not get their fair share of what they produce," wrote political theorist Richard Cornuelle, a former libertarian. He lists other alleged problems

of capitalism that many feel must be solved by government: Capitalism despoils the environment; it is prone to disruptions and depressions, which especially hurt working people; and it leaves undone the things a good society needs most.

## Science

Governments should not worry about the ethical issues thrown up by genetic engineering but focus onthe benefits that can be derived from it, the former head of the human genome project in the United States said. Nobel laureate Dr. James Watson, in Sydney, told ABC radio that cloning did not worry himalthough it might have a downside. "I wouldn't wantto be a clone of a hundred genetically identical people walking around Sydney, having people confuse you for someone else," said Watson, who in the 1960s co-discovered the structure of human DNA. Watson said the benefits of genetic science were enormous. He noted that DNA scans already made it possible to tell people if they had genes that predisposed them to certain diseases. "There are about 80 disease genes cloned now. If we know the gene that has gone wrong we might be able to go from the gene to the function." He said it would not be long before the gene that controls the aging process revealed its secrets.

*—DPA, 4/3/98*

Dying patients often ask their doctors to help them commit suicide or to perform euthanasia, and about 6 percent of doctors have acceded to the request at least once, a new study shows. Researchers from Mount Sinai School of Medicine in New York and their colleagues sent surveys to 3,102 doctors in 10 specialties that often deal with death. More than a third of those who responded said they would write prescriptions to help a patient end his life if it were legal, while 11 percent said they would do so in certaincircumstances now. While physician-assisted suicide is illegal in most states in the U.S., public opinion polls show the majority of people favor legalization.

*—Bloomberg News, 4/23/98*

## Book Review

***Show Me God: What the Message from Space is Telling Us About God,*** Fred Heeren, Day Star Publications, Revised edition 1997, 404 pages.

In his new book, science writer Fred Heeren interviews a number of today's foremost cosmologists to explore how the latest findings of cosmology bear upon the questions of faith. The root question pursued through the book is whether cosmologists have stumbled upon evidence for God.

Heeren himself takes the approach of a skeptic and asks the difficult questions a skeptic would ask. But he also provides a believer's response to the questions. In so doing he introduces people of faith to science and skeptics to the rational basis of faith. The book provides a good overview of the history of cosmology and how cosmologists have been led to various conclusions based upon the discoveries they made. Heeren writes in a down-to-earth style that will help those unfamiliar with the science of cosmology. He adds a fair amount of humor that he cleverly uses to make points.

Using comments from scientists Heeren shows that the current evidence leads to the conclusion that the universe was designed for man.

Of particular interest to Bible Students is a section entitled "Is the Gospel Logical?" Heeren lists seven possible scenarios he calls "cosmic" histories that suggest what God is doing. He uses logic to eliminate all but one. The one he keeps comes close in several respects to the Divine Plan although it misses the mark on the doctrine of "the ransom for all."

The book does a fine job of stimulating thought without becoming adversarial to unbelievers. It will be most enjoyed by those with some technical background, but the lack of such a background will not be a major detriment toward understanding the point of the material. Each chapter is copiously footnoted with the author's sources.

*—David Stein*