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THE CREATION OF THE HEAVENS AND THE EARTH

JOHN C. WHITCOMB, JR.*

Sound Biblical basis is provided for belief in ex nihilo creation, and statements are made as to why evangelical Christians need not consider that this view is philosophically "unhealthy," or that it makes God a deceiver.

Following discussion of creation of the heavens and creation of the earth in separate sections, the author states his position regarding an extensive time interval between the first two verses of Genesis.

The author holds that the Genesis view that the earth was created before the sun, moon, and stars is in serious conflict with total evolutionary theory. He presents nine explicit reasons why the current astronomical idea that the earth came from the sun or from a proto-sun is not true. He closes with a section on the importance of stellar creation in God's eternal purposes.

Ex Nihilo Creation

The Word of God teaches that all non-living things were created supernaturally, instantaneously, and without the use of pre-existent mate-

rials. In the strictest sense, this is the meaning of Hebrews 11:3--"By faith we understand that the worlds (*aionas*, the time-space universe) were framed by the Word of God, so that what is seen hath not been made out of things which appear" (cf. Romans 4:17). This certainly cannot mean that visible material substances are composed of "invisible" atomic particles! Spiritual

*John C. Whitcomb, Jr. is Professor of Old Testament Studies and Director of Post-Graduate Studies at Grace Theological Seminary, Winona Lake, Indiana. He holds the Th.D. degree.

faith is certainly not required to accept the atomic theory in its current form! The point of the verse is that the physical substances that compose our visible universe did not exist in any form whatsoever, other than in the mind of an omniscient God, until He spoke the creative Word.

Not only was creation *ex nihilo*, but it also involved the instantaneous appearance of complex physical entities. The evolutionary concept of a gradual development of heavier and heavier elements throughout cosmic history, for example, is excluded by Scripture. Note the emphasis on the immediate effect of God's creative word in Psalm 33:6, 9--"By the word of the Lord were the heavens made; and all the host of them by the breath of His mouth . . . for He spake, and it was done; he commanded, and it stood fast." There is certainly no thought here of delay, or resistance, or a gradual, step-by-step build-up to fulfillment.

Some scholars, in the name of evangelical Christianity, have denounced this view as philosophically "unhealthy" because it does not line up satisfactorily with empirical evidence (e.g., Thomas H. Leith, "Some Logical Problems with the Thesis of Apparent Age," *Journal of the American Scientific Affiliation*, December, 1965, pp. 121, 122). Not only so, but it is claimed that this position makes God a deceiver (J. Lawrence Kulp, "The Christian Concept of Uniformity in the Universe," *His Magazine*, May, 1952, p. 23, Leith, *op. cit.*, p. 122). An appropriate answer to such assertions has been expressed by Lloyd G. Multhaupt, Department of Physics, Pennsylvania State University:

If the Bible tells us of a non-uniformity in our fundamental laws and/or that it does not allow for millions or billions of years as the age of the earth, then God is not fooling man, rather man is going on a vain search in spite of what God has said . . . Biblical revelation as well as science is a means of gaining knowledge for the Christian. (*Journal of the American Scientific Affiliation*, June, 1966, p. 63).

Christians who truly desire to honor God's Word should not come to it with preconceived ideas of what could or could not have happened, or what can or cannot be true. To be sure, many of the great doctrines and events set forth in Scripture are foolish to the natural mind, because they are spiritually discerned (I Corinthians 2:14). And supernatural creation is one of those doctrines.

No amount of philosophical reasoning or scientific empiricism can modify the pure supernaturalism of such passages as Genesis 1:3--"And God said, Let there be light: and there was light." Analogous to this is the absolute supernaturalism, perfection, and suddenness of God's

work of regeneration in the sinful heart of man: "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" (2 Corinthians 4:6).

The Creation of the Heavens

For convenience of human thought and expression, the Bible refers to three different heavens. The *third* heaven is that glorious place surrounding the immediate presence of God, to which Paul was carried in a transcendent vision early in his Christian experience (2 Corinthians 12:1-4). The *second* heaven seems to be equivalent to what we call "outer space", while the *first* heaven consists of the atmospheric blanket surrounding the earth, in which clouds move and birds fly.

In the first chapter of Genesis, a distinction may be seen between the first heaven, above which the waters were lifted (vss. 8, 20) and the second heaven in which the luminaries were placed (vss. 14-17). There is certainly nothing crude or "pre-scientific," in the bad sense of that expression, about the cosmology of Genesis, as many able expositors have successfully and repeatedly demonstrated (cf. R. Laird Harris, "The Bible and Cosmology," *Bulletin of the Evangelical Theological Society*, March, 1962, pp. 11-17).

What were the "heavens" like at the moment they came from the Creator's hand "in the beginning"? The *third* heaven was populated with hundreds of millions of angelic beings (Daniel 7:10), each one a "son of God" in the sense of a direct creation by God (cf. Job 1:6) and therefore perfect in all their ways (Ezekiel 28:15). They must have been created at the very beginning of the first day of creation, for Job 38:6-7 tells of their singing and of their shout of joy at the creation of the earth.

That they did not exist *before* the first day is indicated by Colossians 1:16 (which tells us that Christ created all *invisible* as well as visible thrones, dominions, principalities and powers *in the heavens* as well as upon the earth) in the light of Exodus 20:11 ("*in six days* Jehovah made heaven and earth, the sea, and *all that in them is*"). (Compare also Psalm 33:6 and Ezekiel 28:13, 15.)

The *second* heaven, the realm of "outer space," was presumably empty and dark, for the sun, moon, and stars were not created until the fourth day, and the special light source which divided the light from the darkness had not yet been spoken into existence.

The *first* heaven, or atmospheric blanket, had neither vapor canopy nor clouds, for the waters were not yet lifted above the expanse ("firmament") in the form of a vast, invisible thermal

vapor blanket, as must have existed until the Flood, and there were no clouds or rain as in our present post-Flood world. Neither Genesis nor geology gives any support to the idea that earth's primitive atmosphere consisted of ammonia, methane, hydrogen, and water, as the evolutionary theory of spontaneous generation of life requires. Philip Abelson, Director of the Geophysical Laboratory, Carnegie Institution of Washington, has shown that such an atmosphere could not have existed (Abstracts 133rd National Meeting, Am. Chem. Soc., April, 1958, p. 53; cited by Duane T. Gish, "Critique of Biochemical Evolution," *Creation Research Society Quarterly*, October, 1964, p. 10).

Some Bible students believe that the heavenly bodies were created in the beginning, but could not be seen from the earth because of a cloud blanket so dense that darkness covered the face of the deep. However, the waters were not lifted up until the second day, and the light that was created on the first day was clearly visible from the earth. Also, if God's work on the fourth day involved merely the unveiling of previously created heavenly bodies, this idea could have been more clearly expressed by the use of the verb "appeared" as in verse 9—"and let the dry land appear." Instead of this, we are told that God "made" two great lights on the fourth day, and that He "made" the stars also.

Although in its general Biblical usage this verb (*asah*- "made") is not as strong as *bara* ("created") for conveying the idea of *ex nihilo* creation, it is used as a synonym for *bara* in the creation narrative of Genesis. This can be demonstrated by comparing 1:21 where God is said to have "created" (*bara*) great whales, with 1:25 where He "made" (*asah*) the beasts of the earth. Surely we are not to understand any significant difference between the creation of sea monsters and land animals! Compare also 1:26 ("And God said, let us make man in our image") with 1:27 ("So God *created* man in his own image"). Thus, the two verbs are used synonymously in this chapter, and the statement that the sun, moon, and stars were "made" on the fourth day means that they were "created" on the fourth day.

The Creation of the Earth

The earth, like the heavens, was created without the use of pre-existent materials (Hebrews 11:3), which clearly implies that it was created instantaneously as a dynamic, highly complex entity. It was spinning on its axis, for in reference to the light source created on the first day, it passed through a night-day cycle. It had a cool crust, for it was covered with water.

The crust, however, had no significant features, such as continents, mountains, and ocean basins, for these were formed on the third day.

Nor did it have sedimentary and fossil strata, for these were basically the effects of the great Deluge. But it did contain all of the basic elements and the foundational rocks of our present earth. As a planet, it was perfect in every way, but at this stage of creation week it was not yet an appropriate home for man. It was "without form and void" (*tohu wabohu*).

The Gap Theory

Many Christians find an extensive time gap between the first two verses of Genesis, the first verse being understood to refer to an originally perfect creation and the second verse to a great subsequent judgment because of Satan's rebellion against God. Before this judgment, which plunged the earth into darkness and chaos, all geologic ages could have transpired, the fossils being relics of that period. In the light of this, we are told that the first phrase of verse two should be translated: "and the earth *became* waste and void."

I believe, however, that the various English versions are correct in translating the verb "was" (*hayetha*) instead of "became," for out of 264 appearances in the Pentateuch, it may be translated "became" only six times (Genesis 3:22; 19:26; 21:20; Exodus 7:19; 8:17; 9:10). In each case, the context must determine the correct translation. However, the clearest way to express the idea of "became" would be to follow the verb with the preposition *lamedth* (as is done in Genesis 2:7 and twenty-five other places in the Pentateuch). This preposition is **not** used in Genesis 1:2.

The sentence structure suggests that the earth's condition in verse 2 is just as God created it in verse 1, for we have an exact grammatical parallel in Jonah 3:3 ("Jonah arose, and went to Nineveh . . . Now Nineveh was an exceeding great city"). Obviously, Nineveh did not become a great city after Jonah entered it. F. F. Bruce points out that if verse 2 indicated an event subsequent to the creation of verse 1, we might have expected in verse 2 a "waw consecutive" with the imperfect tense instead of "waw copulative" with the perfect (i.e., *wattehi ha-arets* instead of *We-ha-arets hayethah*). See the *Journal of the Transactions of the Victoria Institute*, 1946, p. 21.

The phrase "waste and void" (*tohu wa-bohu*) appears elsewhere only in Isaiah 34:11 and Jeremiah 4:23. In these cases, the context speaks of judgment by God upon the Gentile nations and upon Israel. However, in Genesis 1:2, the idea of judgment is not clearly in evidence. The verse simply means that at the moment of creation the earth was uninhabitable; it was not yet a proper home for man. It was void of all life and interesting topographical features, being covered with darkness and with a shoreless

ocean. But it was not necessarily evil, chaotic, or ruined.

The word *tohu* basically means "empty," for in Job 26:7 we read that God "stretcheth out the north over empty space (*tohu*)." Also, Isaiah 45:18 speaks of the God that established the earth "and created it not a waste (*tohu*), that formed it to be inhabited." Thus, God's purpose was not that it should be permanently empty, but that it should be inhabited. By the end of the sixth day of creation, this wonderful purpose was fulfilled.

God, of course, could have filled the earth with living creatures on the first day; but Exodus 20:11 suggests that He did it in six days in order to provide a glorious pattern for man's work week. Therefore, we must not judge the quality of God's creative work by the appearance of the earth at the end of the first day. It was merely the first of six twenty-four hour stages of creation.

Did the Earth Come from a Proto-Sun?

If Genesis teaches that the earth was created *before* the sun, moon, and stars, then Christians who believe the Book of Genesis are obviously in serious conflict with evolutionary theory at this point. For this reason, many Christians feel that Genesis must be interpreted in such a way as to avoid this conflict. After all, is it not perfectly clear from astronomical studies that the earth and the other planets came from the sun or from a proto-sun? It shall be our purpose in the following paragraphs to show that this is not true.

By 1940, all the various encounter or planetesimal theories, which postulated the near approach of another star to our sun, resulting in the drawing off of embryonic planets, had been discarded as hopelessly inadequate explanations of the origin of the solar system (cf. W. M. Smart, *The Origin of the Earth*, 1959, pp. 179-207). In more recent years, Von Weizsacker, Whipple, Spitzer, Urey, Gamow, Hoyle, Kuiper, and others have attempted to avoid the difficulties of the planetesimal theories by returning to a form of nebular hypothesis, whereby the sun and its planets supposedly condensed out of swirling eddies of cold, dark, interstellar clouds of gas and dust. How well this currently popular theory succeeds in explaining the solar system in terms of physical, chemical, and mathematical principles alone may be judged by the Christian for himself after considering some of the basic problems which remain to be solved by evolutionary cosmogonists:

First, before any condensation of gas and dust could occur, the nebula would have diffused into outer space. Dr. Gerald P. Kuiper, a leading proponent of the evolutionary concept, admits that before gravitational attraction would be-

come significant, the particles would have to be as big as the moon (cf. Whitcomb, *The Origin of the Solar System*, Presbyterian and Reformed Publishing Company, 1964, for full documentation).

Second, the theory demands a complex system of roller-bearing eddies of gas and dust, but this is impossible because such vortices must remain perfectly intact during essentially the entire period of planetary accretion. But Dr. Kuiper confesses that "it is difficult to conceive that the beautiful system of vortices would actually have been in existence long enough—even for 10 or 100 years—to get the condensation of the building material for the planets under way." Yet the theory demands many *millions* of years.

Third, what stopped the process from continuing so that the entire mass of material did not form one large body? The sun makes up 99 and 6/7 per cent of the mass of the solar system, so what would have kept the remaining 1/7 of one per cent from falling into the main body?

Fourth, other suns do not seem to be condensing or developing planetary systems. There is much interstellar material in the vicinity of our sun, but it is not condensing. Greenstein of the Mount Wilson Observatory is of the opinion that the known stars rotate so fast that one must conclude that they could never have been formed by a condensation process. David Layzer, professor of astronomy at Harvard University, says that there is no known solution to the problem of the small angular momentum (the property that keeps the sun rotating and keeps the planets revolving around it) of the sun. If it had been part of a gaseous protogalaxy, its angular momentum would have to have been a billion times as much as it now possesses. How it could have lost all but 1/10,000,000 of 1% of its original angular momentum has never been explained ("Cosmogony," *McGraw-Hill Encyclopedia of Science and Technology*, 1960, III, p. 506).

Fifth, the planets contain less than one per cent of the mass of the *solar* system but a staggering 98 per cent of its angular momentum. David Bergamini, in the *Life Nature Library* volume on *The Universe*, observes: "A theory of evolution that fails to account for this peculiar fact is ruled out before it starts" (p. 93).

Sixth, evolutionary theory cannot explain why seven of the nine planets have direct rotation in reference to their revolution around the sun, but Venus rotates slowly backwards, and Uranus rotates at a 98-degree angle from its orbital plane, even though its orbit inclines less than that of any other planet. Professor Layzer states: "It is an open question whether this state of

affairs is consistent" with current theories of the origin of the solar system.

Seventh, evolution has no answer to the problem of retrograde satellites. Of the thirty-two moons in our solar system, eleven orbit in directions opposite that of the rotational direction of their mother planets. Of special interest is Triton, the inner of Neptune's two satellites, which has nearly twice the mass of our moon (its diameter being 3,000 miles) and which revolves every six days in a nearly circular orbit only 220,000 miles from Neptune (closer than our Moon to the Earth).

Isaac Asimov, as well as most evolutionary cosmogonist, believes that Triton "was thrown away from that planet by some cosmic collision or other accident," and that later on Neptune recaptured its lost moon into a retrograde orbit by "a similar accident" (*The Intelligent Man's Guide to Science*, 1960, I, 78). But how many such "accidents" may one be permitted to invoke to prop up a theory already tottering under the weight of its own unproved assumptions? Asimov further states that retrograde satellites are "minor exceptions" to the general rule of satellite orbits. However, eleven out of thirty-two moons having retrograde orbits can hardly be brushed aside as "minor exceptions."

Eighth, what can evolution really offer as an explanation of the angular momentum in these satellite systems? We will permit Professor Lazer of Harvard to state the problem: "Except in the Earth-Moon system (which is exceptional in other respects as well), the primary carries the bulk of the angular momentum, instead of the satellites. . . . This circumstance aggravates the theoretical difficulty presented by the slow rotation of the Sun, for if the Sun has somehow managed to get rid of the angular momentum it would be expected to have, according to the nebular hypothesis, why have the planets not done likewise?"

Ninth, in spite of some ingenious and very complicated theories, it has never satisfactorily been shown why the earth is composed of such heavy elements. In the words of Professor Fred Hoyle of Cambridge University:

Apart from hydrogen and helium, all other elements are extremely rare, all over the universe. In the sun they amount to only about 1% of the total mass. . . . The contrast [with the heavy elements which predominate in the earth] brings out two important points. First, we see that material torn from the sun would not be at all suitable for the formation of the planets as we know them. Its composition would be hopelessly wrong. And our second point in this contrast is that it is the sun that is normal and the earth that is the freak. The interstellar gas and most of the stars are com-

posed of material like the sun, not like the earth. You must understand that, cosmically speaking, the room you are now sitting in is made of the wrong stuff. You yourself are a rarity. You are a cosmic collector's piece.

In the light of all these facts of astronomy, it seems to me that evangelical scientists have no right to lend their support to evolutionary cosmogonies. It brought me a sense of keen disappointment, therefore, when I read an article in the evangelical periodical, the *Journal of the American Scientific Affiliation*, which praises Kuiper's gas-dust nebular theory as "truly simple." The author concludes his article with these words: "It is also most gratifying that this process of planetary formation is but a special case of the universal process of binary-star formation, which seems to be one of God's universal Laws. . . . Truly God is in his Universe, and all will be "right with the world" (Jack T. Kent, "The Origin of the Solar System, Galaxy, and the Universe," *Journal of the American Scientific Affiliation*, December, 1965, p. 117).

In contrast to this attitude, which presumably is quite widespread among evangelical scientists, I have become convinced that the most rational way to explain the origin of our vastly complex solar system is in terms of a direct creation by God. And if this be a reasonable position within the revealed frame of reference of Biblical theism and in view of the conspicuous failures of evolutionary alternatives, may not the supernatural origin of the astronomic system we know the best serve as a model for the supernatural origin of the stellar systems that lie beyond our own?

In other words, if God created *ex nihilo* the two great lights that rule the day and night, He could also have created *ex nihilo* "the stars also." In the words of Dr. Paul A. Zimmerman: "The Biblical account of creation by Almighty God has not been disproved by science. It remains today, even from the viewpoint of reason, I believe, the most logical, believable account of the beginning of the earth and the rest of the universe" ("Some Observations on Current Cosmological Theories," *Concordia Theological Monthly*, July, 1953, p. 513).

The Purpose of the Stellar Creation

Why did God create the sun, moon, and stars on the fourth day rather than the first day? One possible explanation is that in this way God has emphasized the supreme importance of the earth among all astronomical bodies in the universe. In spite of its comparative smallness of size, even among the nine planets, to say nothing of the stars themselves, it is nonetheless absolutely unique in God's eternal purposes.

It was on this planet that God placed man, created in His image, to exercise dominion and

to worship Him. It was to this planet that God came in the person of His Son 1900 years ago to become a permanent member of the human race and to die for human sins upon a rugged cross. And it will be to this same planet that this great God and Saviour will return again to establish His kingdom. Because of its positional superiority in the spiritual order of things, therefore, the earth was formed first, and then the stellar systems; just as Adam was first formed, then Eve (I Timothy 2:13).

Another possible reason for this order of events is that God, by this means, made it clear that the earth and life upon it do not owe their existence to the greater light that rules the day, but rather to God Himself. In other words, God was perfectly able to create and take care of the earth and even living things upon it without the help of the sun. Apart from the Scriptures, of course, this would hardly be an obvious fact to mankind.

In ancient times (and even in some parts of the world today) great nations actually worshipped the sun as a god. In Egypt he was called *Re*, and in Babylon he was known as *Shamash*. After all, such worship seemed quite reasonable in view of the fact that the sun provided light, warmth, and, apparently, life itself.

Even the Jews were greatly tempted to enter into such worship, as may be judged by such passages as Deuteronomy 4:19 and 17:3. Job himself confessed: "If I beheld the sun when it shined, or the moon walking in brightness; and my heart hath been secretly enticed, or my mouth hath kissed my hand: this also were an iniquity to be punished by the judge: for I should have denied the God that is above" (Job 31:26-28).

Perhaps it is not inappropriate to suggest that the evolutionary theory provides a modern and subtle counterpart to the ancient Sun-worship cult, for if we must trace our origin to the sun or to a protosun, and if we live, move, and have our being exclusively through its boundless blessings and provisions, *then it is our God!*

The creation account in Genesis completely undermines all such blasphemies by putting the Sun in a secondary position in reference to the earth. It is not only a mere creature of God, but also a servant to man, the crown of God's creation.

But if the sun, moon, and stars are not ultimately essential to the earth's existence, then why did God create them? Three basic reasons are listed in Genesis 1:14. They are for lights, for seasons (a calendar), and for signs.

As *lights*, they replaced the special and temporary light of the early days.

As a *calendar*, dividing seasons, days, and years, they enable men to plan their work accurately into the distant future, thus reflecting the purposive mind of God.

As *signs*, they teach and ever remind men of vastly important spiritual truths concerning the Creator.

David learned from them the transcendence of God and his own comparative nothingness: "When I consider thy heavens, the work of thy fingers, the moon and the stars which thou hast ordained, what is man that thou art mindful of him?" (Psalm 8:3). The Apostle Paul insisted that men are utterly without excuse for their idolatries, for "the things that are made" give clear testimony to the "everlasting power and divinity" of the Creator (Romans 1:20).

Apparently, the sun, moon, and stars more effectively accomplish these purposes than one great light source could have. There need be no other reason for their existence than this threefold ministry to man.

But would not this have been an unnecessary waste of God's creative energies? Isaiah gives the effective answer: "Hast thou not known? hast thou not heard? The everlasting God, Jehovah, the Creator of the ends of the earth, fainteth not, neither is weary; there is no searching of his understanding" (Isaiah 40:28).

The heavens are the work of God's "fingers" (Psalm 8:3), and when they have fulfilled their God-intended purpose, they will flee away from His face and no place will be found for them (Revelation 20:11). The eternal city will have "no need of the sun, neither of the moon, to shine in it," for the glory of God will lighten it, and the Lord Jesus Christ will be the lamp thereof (Revelation 21:23; cf. 22:5).

Christ and His Word, therefore, must be our final guide as we seek to understand the origin, meaning, and destiny of the heavens and the earth.

ERRATUM

The Editors wish to call attention to an incomplete quotation in the fourth paragraph, left column, on page 34 of the *Creation Research Society Annual*, 1967. The complete quotation is as follows: "Since the demonstration by Pas-

teur that life does not arise spontaneously at the present time, the problem of the origin of life has now been one of determining how the first forms of life arose, from which all of the present species have evolved."