

THE BIBLE AND COSMOLOGY

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We are all aware that in this modern age the idea is widespread that the Bible is in irreconcilable conflict with science. The Bible is assumed to have been worsted in the conflict between Genesis one and evolution. The miracles of the Bible are supposed to be unscientific and those who believe in the cosmology of the Bible are often regarded as pre-Copernican erratic boulders on the landscape, left over after the modern glaciers of science have done their work.

Actually some of this conflict is due to misconception of the Bible's teaching and its relation to scientific theory. The question of miracle, for instance, is a philosophical, not a scientific one. Even in the matter of biological evolution the conflicts, I believe, are not as sharp as is sometimes supposed — especially if extremes of scientific dogmatism on the materialistic nature and animal origin of man are avoided.

The idea is widespread, however, that the Biblical cosmology is hopelessly dated. As no one now believes the world to be flat, so no one can believe the Bible any more. Even among theologians who should know better, remarks are made that we can no longer believe in the Biblical picture of a three-storied universe. Bultmann adopts this position. He assumes the irreconcilable conflict. Then he asks if we should attempt to make the *sacrificium intellectus* and believe the Bible in spite of the facts. Finding this alternative impossible, he proceeds to advance the demythologizing theories for which he is famous. There is a failure to realize that there is a third alternative—that the Bible properly and honestly interpreted may be believable after all. Bultmann was quoted somewhat to this effect by Grounds in a recent E.T.S. Bulletin:

The world-view of the Scripture is mythological and is therefore unacceptable to modern man whose thinking has been shaped by science and is therefore no longer mythological. Modern man always makes use of technical means which are the result of science. In case of illness modern man has recourse to physicians, to medical science. In case of economic and political affairs, he makes use of the results of psychological, social, economic and political sciences, and so on. Nobody reckons with direct intervention by transcendent powers . . . man acknowledges as reality only such phenomena or events as are comprehensible within the framework of the rational order of the universe. He does not acknowledge miracles because they do not fit into this lawful order. When a strange or marvelous accident occurs, he does not rest until he has found a rational cause. The contrast between the ancient world-view of the Bible and the modern world-view is the contrast between two ways of thinking, the mythological and the scientific.¹

This view is deeply entrenched in the modern mind. In a recent book, *Theories of the Universe*, edited by Milton K. Munitz, T. Gomperz speaks of “the immemorial delusions fostered in the name of religion” during the Middle Ages.² And in the same volume, after excoriating and ridiculing the theologians of the early and medieval church, J. L. E. Dreyer says that from Constantine to Dante “had been a long and perfectly stationary period . . . For centuries men had feebly chewed the cud on the first chapter of Genesis.”³

But we can hardly object to the ridicule of the secular scientist when the Biblical picture has been so grievously distorted by destructive criticism. It is modern Bible students who have travestied the Biblical picture, paralleled it to Babylonian nonsense, then informed a secular public that the Bible is not believable by a modern mind.

Thus *The Hastings Encyclopedia of Religion and Ethics* outlines the Biblical cosmology thus: “Originally there was chaos and darkness peopled with dragons and monsters. Then Yahweh battled with the deep, rushing upon it with wind, while the

astral deities shout for joy. Finally after the cosmic victory (similar to Marduk's fight with Tiamat) Yahweh "spreads out a firmament above resting on pillars, provided with windows through which the waters may be let down upon the earth. Beneath, upon the great void, he spread the earth, a dwelling place for living things, under which is the sea or abyss (Tehom). In this abyss as also in the heights above still dwell great monsters . . ." Now I must confess that if this is the Biblical cosmology I must seek refuge in some neo-orthodox mysticism or Bultmannian demythologization. I fear, however, that what we need to do is not to demythologize the Bible, but Hastings Encyclopedia. Destructive criticism has sold the world a shabby substitute for the Biblical cosmology. We need to re-emphasize the Biblical teaching. The foolish notions of a three-storied universe or a flat square earth or a geo-centric universe are not Biblical. And we need to say so as loudly as possible.

I believe that the need to discuss this is especially great today because there is strong current interest in cosmology. We hardly realize it, but in the lifetime of many of us a cosmological revolution almost as great as the Copernican has taken place. I refer to the discovery of the expanding character of the universe, made by Hubble in 1924. This discovery, apparently unchallenged, emphasizes both the enormous size and antiquity of the universe and though it nowhere conflicts with Biblical statements it is popularly supposed to bring into question the possibility of God's creating a structure so vast or if He did, to question the likelihood of His caring for puny man. The God of the Bible is apparently now discovered to be both too small and too big. This planet is now supposed to be one of literally billions. Life is supposed to be an accidental event here and assuredly occurred accidentally also on numerous other planets. Man is but an evolutionary development of this accidental occurrence—a microscopic incident on this cosmic speck that we call the earth. Religion is a delusion, morality a convention, life itself a physico-chemical complex. With these ideas fed to us as the last word of science it is no wonder that an existential hopelessness has engulfed us. It is hard to find meaning in a life-situation such as this.

But is this our true situation? Is the Bible by all this discovery hopelessly outmoded so that its teaching is untrue and therefore irrelevant? What does it say?

First, as to generalities, the Bible does not say that the universe is small. On the contrary, it repeatedly affirms the puniness of man. We need only to refer to such passages as Psalm 8, "What is man, that thou art mindful of him?" or Psalm 104:25, "this great and wide sea wherein are creeping things innumerable," or Genesis 15:5, "Look now toward heaven and tell the stars if thou be able to number them." The Bible nowhere says how vast the universe is. It only says that God is vaster. And yet here is the marvel—he has respect to the lowly. And evidently his laws that hold the worlds in space also direct the electrons in their alleged orbits. He apparently is a big enough God to direct "the stormy wind fulfilling His word" which has the force of many atom bombs, and at the same time to "exalt the horn of his people . . . even of the children of Israel . . . Praise ye the Lord!" (Ps. 148: 8,14).

As a matter of fact, the world of the ancients was not limited to a few square miles. Genesis 10 mentions cities and tribes in Asia Minor, on the Persian Gulf, in Ethiopia, and Southern Arabia, Greece across the water, and Tarshish, possibly in distant Spain. Solomon likely had traffic with India. Sargon of Accad in 2300 B.C. ruled from Persia to Egypt. The Persians ruled from India to Ethiopia. From India to Gibraltar is over 4000 miles. Egypt and Ethiopia together were not far from 1000 miles long. The ancients knew a considerable amount of geography through war and commerce. And in the reaches of the Mediterranean Sea, which is longer than the South Atlantic Ocean is wide, there was plenty of room for a sailor of David's day to feel man's insignificance. True, the reaches of interstellar space were not yet dreamed of, but still the sky was known to be not a little thing. Mountains up to 17,000 feet border Mesopotamia. High mountains, vast seas, long rivers, thousands

of miles of caravan route—all these were known in Bible days. And the Bible insists man is tiny in regard to the universe around him.

With regard to a geo-centric universe the Bible simply does not speak. The center of interest in the Bible is man, or, more accurately, man in relationship to God. God is the center of all things, but not at the physical center. The physical center is just not given. The Bible indeed refers to the diurnal course of sun, moon, and stars even as we do, using the language of observation—the heavenly bodies rise or "go out," they make their circuit across the sky, they "go in" or enter the western sea at the close of the day. But how they do this is nowhere said. Later writings had the bodies guided by angels. The Bible simply says the bodies serve their purposes at God's command. For all the Bible says, they could travel in circles, ellipses, or straight lines. The solar system could be geocentric, heliocentric, or something else and not contradict the Bible. Indeed it is well to remember that the ancient Greeks had deduced our solar system rather accurately. Aristarchus in about 280 B.C. advanced the heliocentric system. Eudoxus had argued that the sun was much larger than the earth. Eratosthenes by spherical trigonometry measured the earth's circumference to an accuracy of 10%. All this advance was swept away by the Ptolemaic theories of the second century B.C., against which Copernicus later rebelled.

It is true that many in the early Middle Ages, before the rediscovery of Aristotle, claimed Biblical support for the idea of a flat earth. Does not the Bible speak of the "four quarters of the earth" (Rev. 20:8) and frequently of the "ends of the earth"? True, the Bible does so speak. So did the king of Assyria and others who claimed to be the "kings of the four quarters." But the terminology need not disturb us. The same kings who use this language knew well that there were other lands under other kings. The expression probably refers more to four directions than four divisions. The Hebrews took their directions from a position facing eastward. The right was South, the left North, in front was East and behind was West. The Egyptians did likewise from a position facing up the Nile. The right was West, etc. These four directions were adopted for convenience and possibly come from the four directions of our bodily parts. We could perhaps divide directions up into nine parts, but four coordinates are convenient and used in modern geography. They prove nothing concerning conceptions of the ancients as to the shape of the earth.

The ends of the earth mean no more. To begin with, the word "earth in Hebrew is quite ambiguous and often means the country. Thus the Messiah's reign from sea to sea and from the river to the ends of the earth (Ps. 72:8 and Zech. 9:10) applies specifically to Palestine and is reminiscent of Solomon's reign "from the river even unto the land of the Philistines and to the border of Egypt" (II Chron 9:26). In short the phrase is a general one and means often just distant extremities. Thus the Gentiles come from the ends of the earth (Deut. 33:17). Nebuchadnezzar ruled to the end of the earth (Dan. 4:11, 22). Jacob, God's servant, was taken from the ends of the earth (Isaiah 41:9). The Israelites were to abhor the idols of the people nearby and unto the ends of the earth (Deut. 13:7). The Israelites if disobedient were to be scattered from one end of the earth even unto the other (Deut 28:64). Obviously all these instances (and there are others) are very general. They speak of distant territories without any regard to the shape of the earth. Similar expressions are used of God's governance, of the sun's course, of the Lord's praise and creatorhood. Different Hebrew words are used, but nowhere is any specification given about the earth's shape. Even Isaiah 40:22, speaking of the circle of the earth, is perhaps not to be pressed beyond reference to the circular horizon of observation.

Now as to the details of cosmology, it is alleged that the Bible pictures Yahweh as in a fight with the primeval chaos in which the monsters of Rahab, Leviathan, Behemoth, and Tehom are vanquished. There is just a hint of truth in this representation. The fight of the Lord with Rahab and Leviathan is mentioned in various poetic

al passages (Ps. 89:10; 74:13, 14; Isa. 27:1; Job. 26:12, 13; Isa. 51:9). But this is not parallel to the Babylonian fight of Marduk with Tiamat from whose body Marduk fashions the heaven and the earth. Rather Leviathan is the mythical monster mentioned in Ras Shamra and pictured on an old seal as having seven heads. It and probably also Rahab is symbolic of Satan, with whom God is in implacable combat. Just as composite and unreal symbols are used in Ezekiel, Daniel, etc. of earthly kingdoms and heavenly beings, so Leviathan is used of Satan and he is so denominated in Revelation 12. But these highly figurative references tell us nothing of cosmology, though the Hastings Encyclopedia (*loc. cit.*) refers to Isa. 27:1 as referring to the Leviathan in the waters above the firmament causing eclipses. Where the author gets this reference to eclipses is mysterious. It is not in the Biblical text!

The thrust of this dragon conflict motif is said to be found in Genesis 1:2. Here the Bible is said to be dependent on the Marduk-Tiamat myth, for the Hebrew word "deep" is Tehom, cognate to Tiamat. Note, however, that in Genesis there is no personification or creation resulting from a battle. The differences from the Tiamat myth are basic. But especially bad is the suggestion that Tehom comes from Tiamat. Tiamat, an Accadian noun, has no guttural letter "h" in the middle. Hebrew maintains the gutturals in Hebrew words, but would not have one in "Tehom" if it were borrowed from the Babylonian. Rather obviously the influence is vice versa. "Tehom" is probably old Semitic for "ocean." The Babylonians personified the ocean into Tiamat. The Hebrew creation account uses the word "ocean" for the primeval cosmic stuff.

"Tehom" is used some thirty-six times in the Old Testament. It is used in Jonah (2:5) of the Mediterranean sea and in Psalm 107:26 of the sea in general, with ships upon it. Seven times in Exodus and the prophets it refers to the crossing of the Red Sea. Twice in the flood narrative the fountains of the great deep are said to be a source of the flood. Here the ocean is probably meant. In Job 28:14; 38:16; 38:30; and 41:32 seas and lakes are meant, as context and parallelism show. In Ezekiel 26:19, the deep is likely the sea which threatens to drown Tyre. In Ezekiel 31:4 and 15 the reference is likely to the waters of the Egyptian Delta. In all, about half the references of "Tehom" clearly refer to seas and lakes.

Several of the references naturally are figurative and obscure and could bear various interpretations. But there are a few that refer to subterranean waters. The clearest is Psalm 78:15 which refers to the water gushing from the rock smitten by Moses. Again in Deuteronomy 3:7 Palestine is characterized as a land of springs and depths flowing from the hills. In view of the above evidence it would be hazardous indeed to suppose that the Hebrews believed in a subterranean ocean. They may have wondered where springs came from and may even have imagined a connection with the ocean. The fact is that there are vast amounts of water underground and such springs as at Banias are the source of a regular river. But the Bible gives no suggestion of a connection of this underground water with mythology or an underworld or a sea on which the earth floats or any such thing. The "Tehom" basically means the ocean and lakes and gives us no real clue to any cosmology.

But what shall we say of the waters under the earth? This phrase seems only to be used in four places. In Exodus 20 and Deuteronomy 4 and 5 it is used in the second commandment. There the earth is distinguished from the seas—not from any subterranean waters. A little reflection will show that these passages all refer to the ordinary seas and lakes. The commandment forbids making images of things in heaven—birds, stars, etc.; in earth—animals, men, etc.; and in the waters under the earth—obviously the abode of fish. Indeed Deuteronomy 4:18 specifies that fish dwell in waters under the earth. The phrase clearly means waters below the shoreline. Fish cannot be caught in an unvisited subterranean world as any fisherman knows!

In Psalm 136:6 the reference to the earth above the waters is a reference to the record of creation of the earth in Genesis 1:10. As waters below the earth refer to waters below shore line, so the earth above the waters refers to land masses above the shore line. That surely is all.

The firmament, according to Hastings Encyclopedia, is a solid stone supported by pillars. The basic meaning of firmament—"raqia"—is "expanse." It is used very little outside of Genesis one and Ezekiel one, in which passage it refers to the platform supported on the heads of the cherubim on which the divine throne stood. The firmament in Genesis 1 apparently means the visible expanse of the sky. As Orr said, the "vault of the heavens in which clouds hung and through which the sun travelled, had probably for the Hebrews associations not very different from what it has for the average mind of today."⁵ No Bible text teaches that the firmament of heaven is solid or holds anything up! Note that the heavens are also said to be like a curtain or scroll that may be rolled up (Isa. 34:4; 40:22).

We turn now to the expression, "windows of heaven." The more common word for window is *hallon* which, by the way, consisted merely of an opening in a wall. There were no sashes to be opened and shut and apparently no shutters either, at least not usually. The lesser used word is *'arubbah*, used in the flood story and in the siege of Samaria account. There the sceptical officer asks the prophet Elisha if barley would be so plentiful if the Lord would make windows in heaven (notice, *make*, not *open*, windows). The word is also used in Malachi 3:10 where the prophet promises blessings through windows opened in heaven. The word is used again in Ecclesiastes 12:3 as a figure for the eyes. In Isaiah 24:18 trouble and anguish are apparently pictured as coming through windows of heaven. Only twice does the word refer to openings in dwellings.

It is clear that the use of this word gives no indication that the Hebrews believed there was a 'firmament provided with windows through which the water may be let down upon the earth' as Hastings Encyclopedia has it. Of the four mentions of such windows, only one is connected with rain and this not a normal rain. Nor was the source of the flood rain said to be above the firmament; it was just "rain from heaven." As J. Orr remarks in his valuable article on "World" in the International Standard Bible Encyclopaedia,⁶ the Bible makes it abundantly plain that rain comes from the clouds in the air which is simply a matter of common observation (cf. Jud. 5:4; I K. 18:45, etc.). The Bible does not teach that the waters above the firmament, of the creative process in Genesis 1, are the source of rain water coming through windows in the firmament today.

The last item of the Hastings Encyclopedia catalogue is the pillars upholding the firmament. Such pillars of the earth or firmament are spoken of perhaps four times in Scripture. In 1 Samuel 2:8 Hannah in her song of praise exclaims that the pillars of the earth are the Lord's and He hath founded the earth upon them. Job 9:6 and Psalms 75:3 also speak of the pillars of the earth in highly poetic passages. In Job 26:11, similarly, the pillars of heaven are mentioned. It is as foolish to base a cosmology on such passages as it would be to take seriously our words "bowels of the earth." Actually, Job 26:7 says that God hangs the earth upon nothing.

As to the idea that the Old Testament speaks of a cavernous nether world called Sheol, I have argued previously that this word is simply a designation of the grave — which, of course, is subterranean.⁷ Many times, the AV translates it so. Even when translated *hell*, it is in parallel with *sepulcher* or from the context can be identified as indicating merely the grave. Sheol was not to the Old Testament believer a nether world of gloomy darkness as the abode of the dead may have been conceived of by Babylonians and Greeks. The spiritual heaven and spiritual hell are pictured in the Bible, but details are not given and we may not overliteralize the descriptions. Interestingly, in the record of the rich man and Lazarus, the two loca-

tions are not said to be one above the other. The fact is that the critically reconstructed cosmology of the Hebrews is quite without warrant.

Finally, as to a three-storied universe, the Bible says not a word except perhaps in the reference to three heavens in II Corinthians 12:2. Here Paul is speaking in practical terms of the heaven of clouds, of stars, and of God. In this sense there are three heavens, but it does not follow that Paul thought of God's heaven as a top story. Paul knew that God was not far distant, for "in Him we live and move and have our being." If the charge be made that the three storied universe consists of a netherworld, the earth's surface, and heaven above, we repeat that the Bible does not physically locate such an underworld, and the heaven of God where He dwells is everywhere. If the Old Testament locates God at all, it locates Him in the holy of holies of the temple, though even here Solomon realized that the heaven of heavens could not contain Him, much less the house that he had built. No, the alleged three stories are the result of leaden footed literalism of modern critics who do not appreciate these figures of the Bible but instead manufacture problems where none exist. Orr's article in the International Bible Standard Encyclopaedia can still stand. Recent views of the universe may indeed complement the Biblical picture, but no departure from its plain teaching is required.

A more vital question arises when we ask, what, exactly, is the Biblical picture of that heaven which is the abode of God and angels. The fact is, as already stated, that the Bible gives very little definite information about it. Angels come and go from there at God's command, but, contrary to popular belief, they do not fly. They seldom have wings (though cherubim are so pictured) and often are indistinguishable from men (Gen. 18, etc.). Angels ascend in the fire of an offering and vanish (Jud. 13:3-20). The angel and accompanying host which spoke to the shepherds in Luke 2 are universally pictured as in the sky, but the Bible does not state this. As noted above, the rich man and Lazarus are not said to be below and above though they always are so represented. The truth is that angels can be right here unseen to us (cf. II K. 6:17). They are not creatures of the physical universe. Much abuse has been heaped on the medieval theologians who argued how many angels could dance on the point of a pin. But I, for one, have never heard the sceptics seriously consider giving an answer to that question. It concerns the relation of spirits to the physical universe. And the relation is not easy to define. We ourselves partake of two worlds, the spiritual and the physical. The heaven of spirits could be right here and we not be aware of it, just as we are not aware of radio waves all about us.

It would seem, however, that there is a place in the physical universe called heaven. Christ's resurrected body was not pure spirit, He assures us (Lk. 24:39). Elijah and Enoch were translated bodily. Christ's resurrected body was visible and tangible and presumably is still so today, though it doubtless is independent of the physical limitations of optimum temperature, sustenance, etc. with which we are so painfully aware. Could we see heaven from a rocket ship close by? Do Khrushchev's gibes have some point that their rocket men looked all around (!) and saw no heaven so there must not be any? Put it this way, heaven may be in itself visible. But God presumably guards it well from prying eyes - even rocket eyes. It could be at a vast distance. It could be on a strange planet or even on a burning sun. God is not limited by the limitations of this life. The spirit world could be here and there as well. Spirits may roam the universe without considerations of velocity even as we, in thought, can roam instantaneously from star to star. The Bible sometimes speaks of the heaven of spirits as "up" and Christ ascended apparently to a cloud and then vanished. "Up" as we now know means "out" somewhere in God's space. Of which, it seems, there is plenty.

1. Vernon C. Grounds, "Theological Progress and Evangelical Commitment," *Evangelical Theological Society Bulletin*, 4:3 (Nov. 1961) p. 75.
2. Theodor Gomperz, "The Development of the Pythagorean Doctrine," in *Theories of the Universe* edited by Milton K. Munitz, Glencoe, Ill.: Free Press, 1957. p. 40.
3. J. L. E. Dreyer, "Medieval Cosmology," *ibid.* p. 137.
4. Hastings, *Encyclopedia of Religion and Ethics* article on "Hebrew Cosmology."
5. J. Orr, *International Standard Bible Encyclopaedia*. article on "World."
6. *Ibid.*
7. R. L. Harris, "The Meaning of the Word Shoel" *ETS Bulletin*, 4:4 (Dec. 1961) pp. 129-135.