

THE CANOPY AND GENESIS 1:6-8

STANLEY V. UDD*

Genesis 1:6-8 is the primary source of information concerning the earth's early canopy. This portion of Scripture has been abused by proponents of the three-storied universe concept. Close scrutiny of that concept shows that the Biblical text cannot be cited as supporting such a theory.

The second day of creation speaks of the creation of the atmosphere, the location of the atmosphere, and the function of the atmosphere. The text also clearly and repeatedly indicates that the initial canopy was composed of water in the liquid state. Other passages such as 2 Peter 3:5-6 confirm the liquid nature of the canopy. This understanding also brings to life the figures used in describing the Noachic Flood.

The second day of creation (Genesis 1:6-8) is vital in the study of creationism and flood geology because it is the primary source of information concerning the "waters above the firmament." This portion of Scripture has been widely abused by proponents of the three-storied universe concept.¹ Such critics contend that the Genesis narrative reflects an early Hebrew understanding of cosmology in which the sky was over-arched by a ponderous, hemispheric bell called the "firmament." This supposed vault supported the "waters above the firmament" and was equipped with trap-doors through which rain might descend. From this imagined structure were then hung the sun, moon, and stars on the fourth day of creation.

Recently, this concept has been given a new place of prominence in pictorial form in Figure 1 in *The New American Bible*. Authors of two other recent translations use the word "vault" in Genesis 1:6-8. These are *The Jerusalem Bible* (1966) and *The New English Bible* (1970). The substitution of the word "vault" for "firmament" reflects the editor's opinion that the ancient Hebrew concept of the universe was that of a three-storied complex.

Septuagint Translation

The foundation stone upon which the three-storied universe concept rests is the definition of the word "firmament" (*rāqī'*). The notable Hebrew lexicon of Koehler and Baumgartner, for example, supplies this definition: "the beaten out (iron-) plate, firmament, the solid vault of heaven."² Support for this position is often sought in the Septuagint (LXX) translation. Almost uniformly,³ the LXX writers translated with some form of the word *stereōma*. While this word often means "firm, solid,"⁴ there is at least one occasion where it has the meaning of "sky, heaven." This latter usage is evident in the translation of Deuteronomy 33:26: "There is none like the God of Jeshurun, who rides the heavens to your help, and through the *skies* in His majesty." The Hebrew word for sky is translated in the LXX as *tou stereōmatos*.⁵

Now, in the case of Genesis 1:6-8, which nuance did the LXX translators intend to convey by the use of *stereōma*—the idea of a solid object or the idea conveyed by our word "sky"? The answer to this question is a matter of conjecture. The Septuagint, therefore, does not contain independent evidence which supports a solid dome concept.

Cognate Verb

As so frequently happens in Hebrew, the idea

conveyed by a particular noun can be elucidated by an examination of its cognate verb. The noun *rāqī'* is derived from the verb *rāqa'*,⁶ and this verb is used 11 times in the Massoretic text of the Hebrew Old Testament.

An examination of the usages of *rāqa'* will demonstrate that the main concept conveyed by the verb is "spread out, stamp, beat out."⁷ At times the action is a vigorous pounding (2 Samuel 22:43), or stamping (Ezekiel 6:11, 25:6).

At other times this verb is used to describe the more subdued hammering involved in the art of expanding and shaping precious metals (Exodus 39:3, Numbers 17:4 [English—16:39], Isaiah 40:19, and Jeremiah 10:9). The shaping of the ground and the overspreading of it with vegetation (Psalm 136:6; Isaiah 42:5, 44:24) is also an action describable by this verb. Finally, in Job 37:18 this verb is used to depict the action of expanding and spreading out delicate clouds.

This latter passage has been cited by Paul H. Seely as "dramatically establishing the solidity of the firmament."⁸ A proper understanding of Job 37:18, however, will demonstrate that such a conclusion is unwarranted. The verse is: "Can you, with Him, spread out the skies, strong as a molten mirror?" (Job 37:18)

In the first place the noun *rāqī'* is not employed in this verse. Instead Elihu used the verb *rāqa'* to describe an action and the action is one of spreading and extending. The noun receiving the action is a "(thin) cloud,"⁹ not the firmament. And surely the three-storied universe concept of the solid dome would not involve a dome constructed of fluffy clouds!

Secondly, the time element does not support Seely's conclusion. This verse is concerned with "present meteorological phenomena, not the activity of God in creation."¹⁰

Thirdly, Elihu's point of comparison was a molten bronze mirror. What do mirrors and clouds have in common? Solidity? Certainly not. Rather both are susceptible to spreading or expansion. The mirror image was not chosen because it was the most solid, impregnable object which Elihu could think of. Instead, it produced a mental concept of something expanded or continuous, something solid in the sense of unbroken.¹¹

A translation of Job in the Aramaic language has been discovered in Cave XI at Qumran. This document, called a targum, has been dated to the second century B.C.¹² While the text is fragmentary, it does contain pertinent segments of Job 37:18. This ancient translation includes an Aramaic word which means "to blow, to swell"¹³ and would certainly fortify an

*Stanley V. Udd is working toward the Doctorate in Theology at Grace Theological Seminary, Winona Lake, Indiana. His address is R.4, Warsaw, Indiana 46580.

understanding of this verse such that the verbal idea of *rāqā'* means "to expand."

This brief examination of the verb upon which the noun translated "firmament" is built shows that the main concept conveyed is to expand or to spread out. The result of the action of this verb does not produce an object which is characteristically solid. Rather it uniformly describes an action in which the resultant product has the characteristic of "thinness or tenuity."¹⁴

It seems therefore in the best interest of exegesis to conclude that the noun should be understood as denoting something extended, expanded or spread out.¹⁵ This understanding is confirmed by Ezekiel's use of "firmament." This word is used five times (Ezekiel 1:22-26, 10:1), and the first occurrence is followed by an explanation of what the prophet Ezekiel intended by the use of this term. He did this by means of a comparison.

The "expanse was like the awesome gleam of crystal (1:22)." The comparative term¹⁶ employed in this verse is used four other times in this chapter (1:4, 7, 16, 27) and in each of these cases it is used to describe the "looks" of the glowing object or area. So Ezekiel understood "firmament" as a proper term for describing an expanse or area of brilliance.¹⁷

Genesis 1:6-8

It should be noted that the firmament in Genesis 1:6-8 is considered to be a substance. First of all, the firmament is referred to as the subject of God's creative activity. "And God said, 'Let there be a firmament.' And God created the firmament." Secondly, the firmament was given a task. "And let it separate the waters from the waters." And that task was completed. Finally, the firmament was given a name. "And God called the firmament heaven."

These three statements, taken together, would strongly suggest that the firmament ought to be viewed as a physical substance. The present day understanding conveyed by the word "atmosphere" is a concept capable of answering to the various functions described in these three verses. In the remainder of this article, therefore, the term "atmosphere," which describes an expanded area of material substance, will be used in place of the word "firmament." What are the details, then, which have been revealed concerning the creation of the atmosphere?

Statement of Creation

"And God created the atmosphere." (Genesis 1:7a) Some have contended that this verse does *not* refer to creation proper but rather to "a making visible."¹⁸ This interpretation is based upon a supposed distinction between the two Hebrew words *bara'* and *asah* (the later being used in Genesis 1:7).

Under close scrutiny, however, this sharp distinction between these two verbs cannot be maintained. John C. Whitcomb has demonstrated some of the impossible exegesis which is achieved by a consistent application of this supposed distinction.¹⁹

It is better, therefore, to conclude that these close synonyms are actually "equivalent"²⁰ in this creation narrative. Genesis 1:7 contains, therefore, the mean-

ing that the *atmosphere* was created on the second day.²¹

Locus of Creation

Location of the creation of the atmosphere is given in Genesis 1:6. "And God said, 'Let there be an atmosphere in the midst of the waters.'" The waters mentioned here must be the same waters mentioned in Genesis 1:2. It is understood that these waters were in a liquid phase.

The Hebrew term translated "in the midst of" is a general term which often means "among (not necessarily of the actual middle)."²² The precise location of the creation of the atmosphere is not delineated in Genesis 1:6. There is no necessity for seeing the locus of creation as the medial plane of the terrestrial ocean. The only concept in verse 6 is that the creation of the atmosphere occurred somewhere within the liquid portion of that original ocean of water.

Initial Function of the Atmosphere

And further in verse 6: "And let it divide the waters from the waters." The function of the atmosphere, then, was to act as a divider between two bodies of water. The Hebrew text contains a preposition (*bên*) which is generally left untranslated, but which indicates the relative positions of the atmosphere and the waters. The layering would be first water, then atmosphere, and finally water, with no intervening gaps. The atmosphere was to form an interface with the water at both extremities. This is also brought out very clearly in verse 7. "And God created the atmosphere and separated (divided) the waters which were below the atmosphere from the waters which were above the atmosphere; and it was so."

The author of Genesis must have anticipated that this concept would be difficult to grasp, for this is now the third clear statement in which the concept is presented that the atmosphere was encompassed with water. There is no difficulty in understanding what is meant by the expression "the waters which were below the atmosphere." It is obviously a reference to the global ocean which covered the surface of the young earth. However, there is no unanimity of interpretation of the next phrase.

"Waters Above the Atmosphere"

Certain writers have felt that the Biblical text in cosmological areas is "pre-scientific" and hence, "not capable of a systematic construction with reference to cosmology."²³ The present writer, however, is convinced that the Bible is historically and scientifically true.

It is also quite common to view the activity of the second creative day as a putting into operation "the physical laws that cause clouds and keep them suspended."²⁴ But proponents of this view do not properly interpret such words as "create," "atmosphere," and "above." What then does the phrase mean?

It is obvious, according to the text of Genesis, that God placed water above the atmosphere on the second day. Now was the water in the gaseous phase or is it possible that it was in the liquid phase? Due to

the subsequent destruction of this canopy at the time of the Flood, the Biblical text is the only source of information. And there are a number of Biblical indicators which point to a liquid canopy.

(1) *The use of the term "water"*

The word "water" is used in Genesis 1:7 with "no specific qualifications."²⁵ No understanding other than the liquid phase seems logical. A word is employed in the Hebrew Bible in other passages which is properly translated "vapor" or "rising mist,"²⁶ but such is not the case in Genesis 1:7. This fact is especially crucial because this is the point in time when this vaporization would have occurred, if indeed it ever occurred.

(2) *The use of the term "above"*

The upper water is clearly placed in a position distinct from the atmosphere. The term translated "above" is made up of two Hebrew prepositions meaning "from" and "upon."²⁷ "Above" is a good translation, but the meaning is more like "beyond it."²⁸ To see the canopy as "in the upper troposphere, below the stratosphere"²⁹ does not technically satisfy the language of Genesis 1:7.

In order to be *above* something, as opposed to being *in* something, there needs to be a line of demarcation, an interface like there is between the terrestrial ocean and the atmosphere. It is difficult to see how there can be such a clear distinction between two bodies, both in the gaseous state.

(3) *Psalms 148:4*

In a context praising the creative achievements of God, the psalmist spoke of "the water which was above the heaven." And in light of the fact that God named the atmosphere "heaven" in Genesis 1:8, this passage may be appealed to as evidence that the psalmist understood Genesis 1:6-8 as a reference to a liquid canopy.

Some might wonder whether this passage indicates that the psalmist considered that water might still have been above the atmosphere in his day. A glance at the Hebrew text shows clearly that apart from the creation context, no time indicator is present. Even the verb "was" is not in the Hebrew text and must be supplied only to complete the thought in the English translation.

According to Psalm 148:6: "He has also established them forever and ever; He has made a decree which will not pass away." Does this verse mean that the canopy, once it was established, could not be removed? No, it is simply a statement indicating that God not only created the items mentioned in verses 1-5, but he also established the course or the destiny of his creation. The surety expressed in this verse does not relate to the unchangeableness of the created universe, rather it speaks of the unfailing obedience of God's creation in carrying out his divine plan.

(4) *2 Peter 3:5, 6*

Another important passage which relates to the second day of creation is 2 Peter 3:5, 6: "For when they maintain this, it escapes their notice that by the word of God the heaven existed long ago and the earth was formed out of water and by water, through

which the world at that time was destroyed being flooded with water."

Translation of the two prepositions *ek* and *dia* is a bit difficult. But, by his commentary on Genesis 1:6-8, Peter clearly allows for the understanding that there were *two* bodies of water associated with the earth prior to the Flood. And the recombination of these two bodies of water at the time of the Flood resulted in the destruction of the earth.

The fact that the word "water" is used in the text three times, and that twice the word must be understood to mean *liquid* water, would strongly suggest, if not indeed establish, that the third occurrence be also understood in that manner. This is further strengthened by the fact that the usage under question is in no way distinguished grammatically from the other two.

(5) *The account of the Flood*

The great Deluge began on the day that "all the fountains of the great deep burst open and the floodgates of the sky were opened." (Genesis 7:11b) The supernatural intervention of God in the destruction of the world is described in this verse. Some interpreters feel that they can use this passage to construct trap-doors in the solid hemispheric dome of their ancient Hebrew reconstruction. The more conservative opinion is to view phrases like "floodgates of the sky" as purely figurative language.

If it is correct to conclude that the meaning of the text is that there was liquid water above the atmosphere at that time then this figure becomes much more appropriate and, in fact, may be an accurate description of what occurred on that awful day. There is no need to postulate "the passage of the earth through a meteorite swarm or the sudden extrusion of large amounts of volcanic dust into the air."³⁰

Incidentally, the liquid canopy interpretation would also allow for a specialized or controlled descent of the water. There would be no need for any wasting of this destructive water over the open ocean. Strategic placement of the "windows of heaven" over land areas would have greatly increased the destructive potential. Nothing with regard to this is contained in the Biblical text, and this suggestion is certainly not germane to the thesis being presented. But the fact is mentioned twice (Genesis 7:14, 12) that 40 days were required for the descent of this water; and, therefore, this descent was carefully controlled and was not a one-shot collapse of the water above the atmosphere.

Conclusion

The revelation from God, as recorded in Genesis 1:6-8, has been examined in this brief work. It is clearly evident that the solid metal dome concept of a three-storied universe is not taught in the Bible. Absolutely no support for this idea may be drawn from the word *rāqī'*. The English word "atmosphere" is in reality the concept contained in the Hebrew word *rāqī'* in this portion of Scripture.

The author of the narrative of the second day of creation, as well as other selected passages, clearly and repeatedly states, that the atmosphere was encompassed by a liquid canopy of water. How is this fact

to be translated into a workable model of the early atmosphere? That project is beyond the scope of this work. But it cannot be repeated too often that the primary source of information concerning the canopy (i.e., Genesis 1:6-8) definitely contains the concept that that body of water existed in the liquid state.

References

- ¹A most thorough presentation of this view may be found in the work by L. I. J. Stadelmann 1970. The Hebrew conception of the world. Biblical Institute Press, Rome.
- ²Koehler, Ludwig and Walter Baumgartner 1958. Lexicon in veteris testamenti libros. Wm. B. Eerdmans Publishing Co., Grand Rapids, p. 909.
- ³The single exception is found in Daniel 12:3, where *ouranou* is used instead.
- ⁴Liddell, H. G. and Robert Scott 1968. A Greek-English lexicon. Revised by Henry S. Jones and R. McKenzie. Ninth edition. At the Clarendon Press, Oxford. p. 1641.
- ⁵The Hebrew word is *shehāqim*; and it is paralleled with *shāmayim* in this text.
- ⁶This is deduced from the fact that *rāqa* is not a denominative verb. Cf. Brown, Francis, S. R. Driver, and Charles A. Briggs 1972. A Hebrew and English lexicon of the old testament. At the Clarendon Press, Oxford, p. 955.
- ⁷Koehler, Ludwig and Walter Baumgartner, *Op. cit.*, p. 910.
- ⁸Seely, Paul H. 1969. The three-storied universe, *Journal of the American Scientific Affiliation*, 21(1):19.
- ⁹Brown, Francis, S. R. Driver, and Charles A. Briggs, *Op. cit.*, p. 1007.
- ¹⁰Newman, Robert C. 1969. Letters to the Editor, *Journal of the American Scientific Affiliation*, 21(3):94.
- ¹¹The same adjective ("hard") is used in similar imagery in Ezekiel 3:7, 8, and 9.
- ¹²van der Ploeg, J. P. M., and A. S. van der Woude 1971. Le targum de job de la grotte XI de Qumran. Edited and translated in collaboration with B. Jongeling. E. J. Brill, Leiden, pp. 1-8. Editors of this edition note some striking similarities of the grammar of this targum to that of the Aramaic section of Daniel. This would imply an even earlier date, therefore, for this translation of the book of Job. See p. 4.
- ¹³The reconstruction of the text is *lm]nph*. *Ibid.*, p. 68. And the definition of *nph* may be found in Jastrow, Marcus 1950. A dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the midrashic literature. Vol. II. Pardes Publishing House, Inc., New York, p. 922.
- ¹⁴Gaenssle, C. 1952. A look at current Biblical cosmologies, *Concordia Theological Monthly*, 23(11):742.
- ¹⁵The obvious incompatibility of the definition of the verb with that of the cognate noun in the lexicon of Koehler and Baumgartner provides legitimate grounds for questioning the validity of their definition of *rāqī*. Compare Koehler and Baumgartner, *Op. cit.*, pp. 909 and 910.
- ¹⁶The Hebrew term is *ke'én*.
- ¹⁷Further confirmation may be seen in the Syriac translation (Peshitta), which uses *mīlla*, coming from the root *ṭl*, which means "to cover, overshadow, shade." Smith, J. Payne 1903. A compendious Syriac dictionary. At the Clarendon Press, Oxford, p. 174.
- ¹⁸The new Scofield reference Bible, p. 1, note 6.
- ¹⁹Whitcomb, John C. 1972. The early earth. BMH Books, Winona Lake, Indiana, p. 127-129.
- ²⁰LaSor, William Sanford 1956. Notes on Genesis 1:1-2:3, *Gordon Review*, 2(1):28.
- ²¹Since the atmosphere was not created until the second day, it follows that the translation of Genesis 1:2 now currently in vogue in which *rūah* 'elohim is rendered as "a mighty wind" is unjustified. Cf. von Rad, Gerhard 1961. Genesis. Translated by John H. Marks, SCM Press, Ltd., London, p. 47.
- ²²Brown, Francis, S. R. Driver, and Charles A. Briggs, *Op. cit.*, p. 1063.
- ²³Ramm, Bernard 1955. The Christian view of science and scripture. Wm. B. Eerdmans Publishing Co., Grand Rapids, p. 69. Cf. England, Donald 1972. A Christian View of Origins. Baker Book House, Grand Rapids, p. 121.
- ²⁴Leupold, H. C. 1942. Exposition of Genesis, Vol. I. Baker Book House, Grand Rapids, p. 60. Cf. Kidner, Derek 1967. Genesis. Inter-Varsity Press, Chicago, p. 47. Also Archer, Gleason L., Jr. 1964. A survey of old testament introduction. Moody Press, Chicago, p. 177.
- ²⁵Goppelt, Leonard. 1972. *hudōr*. Theological dictionary of the new testament. Vol. VIII. Edited by Gerhard Friedrich. Translated and edited by Geoffrey W. Bromiley. Wm. B. Eerdmans Publishing Co., Grand Rapids, p. 317.
- ²⁶The word is *nesim*, found in Psalm 135:7; Proverbs 25:14; Jeremiah 10:13 and 51:16. Cf. Brown, Francis, S. R. Driver, and Charles A. Briggs, *Op. cit.*, p. 672.
- ²⁷*min* + 'al = *mē'al*. Cf. Koehler, Ludwig, and Walter Baumgartner, *Op. cit.*, p. 704.
- ²⁸Young, Edward J., 1964. Studies in Genesis One. Baker Book House, Grand Rapids, p. 90. See especially note 94.
- ²⁹Whitcomb, John C., Jr., and Henry M. Morris 1962. The Genesis flood. Presbyterian and Reformed Publishing Co., Philadelphia, p. 257.
- ³⁰*Ibid.*, p. 258. Sunspot activity has also been suggested as a possible cause of the collapse of the canopy. Cf. Armstrong, Harold 1970. Comments on Scientific News and Views, *Creation Research Society Quarterly*, 7(1):76.

CREATION RESEARCH SOCIETY

Board of Directors *Biochemistry*: Duane T. Gish, Ph.D., Institute for Creation Research, 2716 Madison Avenue, San Diego, CA 92116. *Biological Sciences*: Wayne Frair, Ph.D., Secretary, The King's College, Briarcliff Manor, NY 10510; George F. Howe, Ph.D., Los Angeles Baptist College, Newhall, CA 91321; John R. Meyer, Ph.D., University of Louisville, Louisville, KY 40208; Wilbert H. Rusch, Sr., M.S., LL.D., Membership Secretary, Concordia Lutheran College, Ann Arbor, MI 48104. *Genetics*: John W. Klotz, Ph.D., Academic Dean, Concordia Seminary, St. Louis, MO 63105; Walter E. Lammerts, Ph.D., Freedom, CA 95019; William J. Tinkle, Ph.D., Timbercrest Home, North Manchester, IN 46962. *Geology*: Clifford L. Burdick, M.S., D.Sc., 924 N. 6th Avenue, Tucson, AZ 85705. *Geophysics*:

Harold Slusher, M.S., D.Sc., University of Texas at El Paso, TX 79902. *Physical Sciences*: Harold Armstrong, M.S., Publications Editor, Queens University, Kingston, Ontario, Canada; Thomas G. Barnes, D.Sc., President, University of Texas at El Paso and Consultant to Globe Universal Sciences, Inc., El Paso, TX 79902; Richard G. Korthals, M.S., Treasurer, Dean, Concordia Teachers College, River Forest, IL 60305; Henry M. Morris, Ph.D., Institute for Creation Research, 2716 Madison Avenue, San Diego, CA 92116; George Mulfinger, M.S., Bob Jones University, Greenville, SC 29614; Emmett L. Williams, Jr., Ph.D., Vice-President, Bob Jones University, Greenville, SC 29614. *Science Education*: John N. Moore, M.S., Ed.D., 136 Brody Hall, Michigan State University, East Lansing, MI 48824.