## **Chapter Five**

# Genesis 1:16 and the Age of the Universe

Genesis 1:16 has been described as a 'pivotal' text in the Genesis creation account, not only on account of its place in the text, but more importantly because it raises fundamental questions of profound significance. When read in context this verse points to an old universe, a view that is confirmed by a vast amount of cosmological evidence, some of which will be considered later. Commenting on the creation account in Genesis chapter 1, James McKeown, a Genesis and Hebrew specialist, says, 'This is more than a piece of prose narrative; it is literary choreography in which every word has been carefully chosen and precisely positioned.'

The NIV translation of this text is representative of most modern English versions: 'God made two great lights – the greater light to govern the day and the lesser light to govern the night. He also made the stars.' The questions arise from the final sentence, 'He also made the stars.' When were the stars created? And why was the record of their creation included at this point in the creation account? Were they created at the same time as the sun and the moon, as one interpretation of the text might suggest? Were they created for a similar purpose, as adjunct luminaries to the moon to lighten the night sky? And, of crucial significance, what are the 'stars'? Does the word mean what it still means today? Or might it also imply what it means from the perspective of a more recent cosmology? Can it legitimately be understood to include planets, galaxies and other objects in the night

<sup>1.</sup> James McKeown, Genesis, (Grand Rapids, MI: Eerdmans, 2008), p. 19.

skies from which light can be seen on earth? Mark Garlick points out that, in terms of contemporary cosmology, the word 'stars' includes constellations, star clusters, nebulae, globular clusters, celestial clouds, pulsars and quasars.<sup>2</sup>

'He also made the stars.' It might be thought that the meaning of this brief sentence at the end of verse 16 is clear enough but of little consequence to the rest of the Genesis creation account, which deals principally with the creation of the earth as a home for living creatures and humankind. Was it perhaps an afterthought, as suggested in the note on verse 16 in the NIV, unrelated to the main thrust of Genesis chapter 1 or included perhaps as a warning against seeing the stars in a similar way as the sun and moon were widely seen in the ancient world, deities to be worshipped?

There are four principal factors which must be considered in any attempt to provide satisfactory answers to these questions: context, the original text, translation, and the meaning of the word 'stars', all of which are critical to the correct interpretation and understanding of this apparently uncomplicated assertion that God created the stars.

#### Context

The necessity of reading a text in context is one of the fundamental principles of biblical interpretation, as discussed in chapter one of this book. Without repeating what was said there, it may be helpful to note that Gerald Klingbeil states emphatically 'Context is key when we read scripture.' Ekkehardt Mueller likewise says that 'Being able to discern how a text is embedded in its context helps ... avoid false or biased interpretations'. In the case of Genesis 1:16 the immediate context is of crucial significance. Verse 16 must be read in light of the surrounding text, verses 14-15 and 17-18, which record the account of the creation of 'two great lights' and their relationship to the earth as a suitable habitat for life.

<sup>2.</sup> Mark A. Garlick, *Astronomy: A Visual Guide*, (Scoresby, Victoria, Australia, The Five Mile Press, 2011), p. 152-70.

<sup>3.</sup> Gerald Klingbeil, 'Making Sense of the Holy', in Bill Knott, ed., *Adventist World* (January 2020), p. 11.

<sup>4.</sup> Ekkehardt Müller, 'Guidelines for the Interpretation of Scripture', in George W. Reid, ed., *Understanding Scripture: An Adventist Approach* (Hagerstown, MD: Review and Herald Publishing Association, 2006), p. 118.

In these verses the functions of the sun and moon are clearly stated. The 'two great lights', the sun and moon, were created to:

- 'give light on the earth' (verses 15, 17)
- 'separate the day from the night' (verse 14) or 'separate light from darkness' (verse 18)
- 'govern the day and the night' (verse 18)
- 'mark seasons and days and years' (verse 14).

The questions must therefore be asked: Were the stars also created for these reasons? Are their functions the same as those of the sun and moon? These are necessary and reasonable questions, and it goes without saying that to reply 'No' to these questions is not to say that God did not create the stars. Verse 16 clearly asserts that he did. What it does not say is that he created them to assist either sun or moon in their designated roles 'to govern the day', 'to govern the night' or 'mark seasons days and years'. Verse 16 does not say when or why God made the stars. In context, however, the unqualified assertion that he did make them may be a simple statement of fact, or possibly an indication that they may have been created for a different, undisclosed purpose and that the fact of their creation was included in the overall creation account because it was important for those reading it, then and in the future, to understand and remember their origin.

## The Hebrew Text

As mentioned previously Hebrew is not an easy language to read, let alone to interpret or translate. It has an unfamiliar alphabet of only 22 letters, some of which are very similar, has no vowels, punctuation or uppercase letters, and reads from right to left in unbroken text working 'backwards' until the end of the document is reached.<sup>5</sup> While scholars have generally come to grips with these anomalies, many difficulties remain and it is not an overstatement to say that the untrained reader would find many challenging problems, some of which are still encountered in some translations today.

A cursory reading of Genesis 1:16 in most English translations conveys the idea that the sentence, 'He also made the stars', is directly translated from the original Hebrew, because that is how the

<sup>5.</sup> See, for example, A.B. Davidson, *An Introductory Hebrew Grammar*, 24th edn (Edinburgh: T. & T. Clarke, 1943), pp. 4, 5.

Hebrew has long been understood in context by many translation committees as well as countless individual Old Testament scholars. The original Hebrew, however, is not so straightforward. It does not have a separate sentence stating: 'God also made the stars', but merely a phrase without a subject or a verb - 'and the stars' - which runs on from the preceding text without break or punctuation. The literal translation of Genesis 1:16 in The Interlinear Bible, when the words are put in the order in which they read in English is: 'And God made two great luminaries: the luminary great for the rule of the day and the luminary small for the rule of the night, and the stars.'6 How do 'the stars' relate to the 'two great luminaries'? The time or purpose of their creation is not clear and cannot be deduced from the original Hebrew text, Furthermore, there is in the Hebrew no mention of a creator or any creative activity regarding the stars, a fact that cannot simply be overlooked since it allows for an alternative translation and interpretation.

The King James or Authorised Version reads, 'And God made two great lights; the greater light to rule the day, and the lesser light to rule the night: he made the stars also.' The KJV supplies the words 'he made' in italics, thus remaining true to the original Hebrew but giving room in translation for a separate phrase or sentence and the widely-held understanding that the creation of the stars need not be related in time to the creation and function of the 'the two great lights'. As noted, many modern English translations give a separate sentence at the end of verse 16: 'God also made the stars', or 'God made the stars also', in either instance without showing any supplied text, although the verb 'made' is not present in the original text. Several more recent translations, particularly those from Jewish sources, reflect the absence of the Hebrew verb at the end of verse 16. and conclude the verse with the phrase, 'and the stars'. The Hebrew allows either translation, both of which are in harmony with the whole context of Genesis 1:14-18 where, as already noted, the function of the 'two great lights' is chiefly 'to mark seasons and days and years' (verse 14) and to 'separate light from darkness' (verse 18), neither of which functions the stars perform.

<sup>6.</sup> Jay P. Green, Sr, ed. and trans., *The Interlinear Bible*, 2nd edn (Peabody, MA: Hendrickson Publishers, 1986), p. 1.

<sup>7.</sup> I am grateful to Dr Steven Thompson for drawing my attention to recent Jewish translations.

It is necessary at this point to comment briefly on the Masoretic Hebrew text which, after many centuries, is still the standard text for translation of the Old Testament. Between the sixth and the tenth centuries, a succession of Hebrew scholars, known as Masoretes were chosen, with their primary task being to make the Hebrew text more intelligible, including adding vowel markings to the traditional text. Continuing study of this text and other versions of the original Hebrew has shown that the Masoretic text itself is not without problems and has led to the claim that earlier versions of the Hebrew are more reliable than the annotated version produced by the Masoretes. One source summarises the issue as follows:

The Masoretic text was an answer to a problem that had been building in the Jewish community for centuries: biblical Hebrew was ambiguous, and most Jews did not know how to read it anymore. With no vowels, punctuation, or stress marks, the original Hebrew left a lot of room for interpretative errors.<sup>8</sup>

The Masoretic text does not really solve either the basic problem of ambiguity, or the specific problem arising from the unqualified statement, 'He also made the stars.'

#### **Translations**

All credible versions of the Bible are direct translations from the Hebrew and Greek texts and are the careful work of duly appointed committees. The procedure established for the translation of the King James Bible of 1611 is a fine example of the care taken to ensure that the translation was as accurate as possible. More than fifty of the best Hebrew and Greek scholars of the day, drawn mainly from the universities of Oxford and Cambridge, were divided into six groups, each group given the task of translating a section of the text. They were required to translate the original text as accurately as possible and to present it in the clearest possible English of the day. Each group's work was then scrutinised by other scholars to

<sup>8.</sup> Ryan Nelson, *What Is the Masoretic Text? A Beginner's Guide*, 28 September 2018. Available online at: https://overviewbible.com/masoretic-text/ (accessed 27 January 2024).

ensure accuracy and to eliminate as far as possible any errors or bias before the entire translation was submitted for publication. The whole process was begun in 1604 and completed in 1611.9 It is worth noting Alister McGrath's conclusion to his account of the KJV and its translation. 'Our culture has been enriched' by the King James Bible, he maintains. 'We shall never see its equal – or even its like – again.' <sup>10</sup>

Since then many new translations have appeared, most of them the work of committees made up of individuals from different backgrounds, with different viewpoints and theological persuasions. The aim is still to be as accurate, readable and bias-free as possible. This is as true of the Genesis text as it is of all books of the Bible. Regarding Genesis 1:16 and the Hebrew phrase 'and the stars', which immediately follows the creation account of the sun and moon, the following versions illustrate the consensus among contemporary scholars of Hebrew about the translation of the original text:

'He made the stars also', NKJV 'He also made the stars', NIV 'He also made the stars', NLT 'he made the stars also', KJV 'he also made the stars', GNT 'he made the stars also', RSV 'He made the stars also', NASB 'He made the stars also', NET 'He made the stars also', ASV.

Even acknowledging the absence of a Hebrew verb at the end of verse 16, it is difficult to avoid the conclusion that the original text is best translated in the light of its context, as it is in all the above translations, as a stand-alone statement of reality, 'He also made the stars', without any textual or theological link to the creation of the sun and moon.

### The Stars

The Hebrew word for 'star' is *kokab*. It is used 36 times in eighteen books of the Old Testament and always means what it says as understood in English today. It is the word used in Genesis 1:16

<sup>9.</sup> Alister McGrath, *In the Beginning: The Story of the King James Bible* (London: Hodder & Stoughton, 2001), pp. 172 ff.

<sup>10.</sup> Ibid., p. 310.

and, for example, in Genesis 22:17 and Exodus 32:13, in which God's promise to Abraham is recorded, 'I will make your descendants as numerous as the stars in the sky' (NIV). There is no distinction in these texts, or any others in which *kokab* is used, between suns and planets and galaxies and other heavenly bodies which can be seen by the naked eye in the night sky.<sup>11</sup> The same expression is still used today when we look up on a clear night and see 'the stars'. In Genesis 1:16 therefore it refers to everything that can be seen in the Milky Way and beyond, planets and galaxies included. It is worth noting that the context in which the sun and moon perform their allotted functions as described in Genesis 1:14-18 implies the existence of what is now known as the Solar System, even though the author of Genesis was probably unaware of it.

The word 'star' is still defined today as 'a celestial body appearing as a luminous point in the night sky', seen on earth from a flat, one dimensional perspective, although in reality most of these points of light are huge suns or massive galaxies speeding through space and millions of miles apart in a three-dimensional plane. The 'stars' in Genesis 1:16 were just that, no more, no less. Their number is incalculable, which is what Abraham meant when he spoke of his descendants in these terms. The implications of all this are almost beyond comprehension.

We can now return to the questions raised earlier by the reference to 'stars' in Genesis 1:16. What are they? What is their function? And why is there reference to them in a passage which is concerned primarily with the functions of the sun and moon in relation to life on earth, functions which the stars do not have?

Perhaps the best way to understand the meaning of the sentence 'God made the stars also' is to see it as a parenthetical statement of fact, included in the record of creation at an appropriate point, unrelated to the immediate context, but nevertheless important enough to be part of the creation account itself. God created the stars as he created everything else recorded in Genesis chapter 1, but not necessarily at the same time, and obviously not after the appearance of the sun and moon. This would be in harmony with the statement in Genesis 1:2, in which the earth is said to have been 'without form and void' with 'darkness' covering 'the deep' (NKJV), before the work of the six-day creation began with the introduction of light. The note on this text in the *NIV Study Bible* says that creation as recorded in Genesis chapter 1

<sup>11.</sup> According to Young's *Analytical Concordance*, the Greek word for star used in the New Testament means a luminous meteor.

'Completes the picture of a world awaiting God's light-giving, ordermaking and life-giving word.' It is not stated how long the earth existed in this chaotic condition before it was given its final form but, however long it was, the 'stars' were already in existence.

## **Cosmological Confirmation**

Two significant facts emerge from the foregoing: that Genesis chapter 1 is primarily the account of the creation of the earth as a suitable habitat for human existence; and that the earth is part of a what we now know as the Solar System, which itself is part of a much larger and older cosmos. Other passages of the Bible reveal that the earth as it is now is not as it was when originally created. There has been a cosmic rebellion, now centred on earth, which is still in the process of being resolved. They also reveal that it is the Creator's intention to create 'new heavens and a new earth' when the cosmic rebellion now working itself out on earth is finally dealt with.

Be that as it may, it is indisputable that there is today abundant cosmological confirmation that the universe is older than earth in the form in which it now exists, older even perhaps than the dark, uninhabited mass from which the earth was created and which became the battleground of the cosmic conflict. Cosmology and the findings of astronomy have revealed more knowledge of the universe than could ever have been imagined when Genesis was written. When cosmologists and astronomers speak today about the starry heavens as they have been revealed by the most powerful and accurate telescopes yet invented, they still speak of 'stars', in much the same way as did the author of Genesis - distant pinpoints of light in the night skies. However, they also speak of planets, constellations, galaxies, star fields like the Milky Way, comets, globular clusters, nebulae and deep space, of light-years and an expanding universe, of suns so large that they make our sun seem insignificant and our own planet infinitesimal, of untold millions of other galaxies many of which make our home galaxy, the Milky Way, very ordinary by comparison. Jo Dunkley, professor of astrophysical sciences at Princeton University and one of today's most accomplished and respected astronomers, writing in 2019, states that there are approximately 100 billion galaxies in the

<sup>12.</sup> On Genesis 1:2, see *The NIV Study Bible: New International Version* (Grand Rapids, MI: Zondervan, 1985), p. 6.