

A Further Examination of the Gospel in the Stars

Danny Faulkner, Answers in Genesis, P. O. Box 510, Hebron, Kentucky 41048

Abstract

The gospel in the stars is a popular topic with many recent creationists. In an earlier paper, I examined some problems with this thesis. Since that earlier publication, the primary source on the subject has become available, allowing this much more detailed examination. In this current study, I identify many problems with the assumptions, methodologies, and conclusions made with the gospel in the stars thesis. The etymologies of terms and names are questionable at best and most likely are simply wrong. The biblical arguments are poor, and some conclusions are contrary to biblical principles. While well intended, the gospel in the stars is fraught with problems, and Christians are discouraged from using it.

Keywords: constellations, gospel in the stars

Introduction

The sky is divided up into many groupings of stars that we call constellations. Astronomers today recognize 88 constellations, and those 88 constellations encompass the entire celestial sphere. About 40 of the constellations are relatively modern, dating back 500 years or less. The modern system was codified by the International Astronomical Union in 1922. In addition, many stars have been given proper names. We do not know who divided up the sky and named the stars and star groups or why they did, but there are many theories concerning the origin of these things.

One theory is that they represent the vestiges of a primal gospel presented to early man before God's written revelation. We call this view "the gospel in the stars." According to this theory, God presented the full story of His plan of salvation to Adam, and either Adam or his descendants through Seth's godly line preserved that knowledge. Either God ordained patterns in the sky to teach the lesson, or early men crafted the gospel in the stars to preserve the message. With the coming of the written Word of God, the gospel message in the stars was no longer needed and hence faded from use. Additionally, the passage of time allowed ungodly men to pervert the original gospel in the stars, mingling it with much pagan mythology and ultimately turning it into the religion of astrology. Or so says the gospel in the stars theory.

Supposedly, this long-hidden truth was rediscovered in the mid-19th century by the English woman Frances Rolleston, who published her work in the book, *Mazzaroth, or the Constellations* (Rolleston 1865). The posthumous publication of her book soon influenced others. An early example of her influence is seen in James Gall's *Primeval Man Unveiled: or, the Anthropology of the Bible* (Gall 1871), which includes a chapter on "Antediluvian Theology," fully

crediting Rolleston as his source. Better known and more complete treatments with embellishment are the books of the American pastor, Joseph A. Seiss (*The Gospel in the Stars* 1882), and the English theologian, E. W. Bullinger (*The Witness in the Stars* 1893). To understand Rolleston's key role in developing the gospel in the star thesis, consider this from the preface of Bullinger's book:

Some years ago it was my privilege to enjoy the acquaintance of Miss Frances Rolleston, of Keswick, and to carry on a correspondence with her with respect to her work, *Mazzaroth or, the Constellations*. She was the first to create an interest in this important subject. Since then Dr. Joseph A. Seiss, of Philadelphia, has endeavored to popularize her work on the other side of the Atlantic; and brief references have been made to the subject in such books as *Moses and Geology*, by Dr. Kinns, and in *Primeval Man*; but it was felt, for many reasons, that it was desirable to make another effort to set forth, in a more complete form, the *witness of the stars to prophetic truth*, so necessary in these last days.

To the late Miss Rolleston, however, belongs the honor of collecting a mass of information bearing on this subject; but, published as it was, chiefly in the form of notes, unarranged and unindexed, it was suited only for, but was most valuable to, the student. It was she who performed the drudgery of collecting the facts presented by Albumazer, the Arab astronomer to the Caliphs of Grenada, AD 850; and the Tables drawn up by Ulugh Beigh, the Tartar prince and astronomer, about AD 1450, who gives the Arabian astronomy as it had come down from the earliest times (Bullinger 1893, pp. iii–iv).

Seiss expressed himself similarly:

A more valuable aid to the study of the subject as treated in this volume is Frances Rolleston's *Mazzaroth; or, The Constellations*—a book from an authoress of

great linguistic and general literary attainments, whom Providence rarely favored for the collection of important facts and materials, particularly as respects the ancient stellar nomenclature.... And from her tables and references the writer of these Lectures was helped to some of his best information, without which this book could hardly have become what it is (Seiss 1882, p.6).

These two later books by Seiss and Bullinger, but particularly Bullinger's, greatly influenced later writers on the subject. A recent example is the influential pastor Dr. D. James Kennedy at Coral Ridge Presbyterian Church in his book, *The Real Meaning of the Zodiac* (Kennedy 1989).

In an earlier paper (Faulkner 1998), I examined some of the factual and biblical issues involved in this theory, and found that the theory has serious problems. That study was based upon the books of Seiss and Bullinger, but not the original work of Rolleston. The reason for that omission was that while the books of Seiss and Bullinger have been available for years, the one by Rolleston remained out of print for nearly 140 years. Rolleston's book was republished since the earlier paper, and so I endeavor in this second paper to examine the gospel in the stars once again, giving particular attention to the Rolleston's original book on the subject. In addition, other secular sources on star names and meanings were not generally available at the time of the previous study. Since then, a number of these long out of print books have been reprinted or made available in electronic form on the internet, so I have consulted some of them for the current study as well.

Since the earliest writing on the gospel in the stars appears to be Rolleston's book, we ought to regard this as the primary source; the books of Seiss and Bullinger are secondary sources. All other sources, since they heavily rely upon Bullinger or even later sources, are tertiary or even quaternary sources. For those who wish to examine these sources for themselves, Seiss' book is most readable. Rolleston's book is the least readable. Part of the problem likely is the very different writing style of a century and a half ago, but most of the difficulty is that her book was a work in progress. Rolleston died before completion of her manuscript, and much of her manuscript amounted to her notes. Bullinger organized the material a bit better in his book, but it does follow much of the style of Rolleston. Seiss' book is organized differently, and it follows a much more readable style.

Supposed Biblical Support

Before delving into Rolleston's methodology, it is helpful to examine the alleged biblical basis for the gospel in the stars. First, proponents of the gospel in the stars theory observe that there was no written

revelation for a long time. We don't know when the book of Job was written; some Bible scholars think it likely predates the Pentateuch. Since we don't know when Job was written, and thus setting it aside for the time being, the first written biblical text would be at the time of Moses, circa 1400BC. If we assume that the Creation was near 4000BC, there was more than 2,500 years with no written Scripture. Surely, proponents of the gospel in the stars reason, there must have been some mechanism to pass on God's plan of redemption. Josephus (1897) reported that according to Hebrew lore, Adam was the father of astronomical knowledge and that either he or his son Seth created the constellations and passed on that information to their posterity. It is quite likely that Adam developed some astronomical science. After all, Genesis 1:14 records that one of the purposes of the heavenly bodies is for man to mark the passage of time (seasons, days, and years), and this always has been a function of astronomy. As the first man, Adam was in place to establish astronomy, and I therefore have no quarrel with this information from Josephus.

However, Josephus does not tell us in any detail exactly what astronomical knowledge Adam developed. It is reasonable to conclude that Josephus likely had in mind what astronomical knowledge was available in his day. As we shall soon see in a statement from Josephus, he had no problem with astrological lore. So it appears that Josephus was at the very least familiar with astrology and that, though being a Jew, was not judgmental of it (despite the fact that Hebrew Scriptures, such as Deuteronomy 4:19, 17:3, and Isaiah 47:13–14 had warnings against astrology). The proponents of the gospel in the stars hypothesize that God revealed His entire plan of redemption to Adam (or alternately, Seth), and that God ordained the constellations as the mechanism to perpetuate that plan until the giving of the written revelation. However, this is entirely conjectured in that it is not clearly stated or even implied in Josephus and it is not clearly stated in the Bible. Furthermore, this approach seriously underestimates the efficiency of oral transmission of information to reliably preserve truth due to the longevity and overlapping of generations in the early world (see Wise 2001, pp.228–231).

Proponents of the gospel in the stars further point out that Psalm 147:4 and Isaiah 40:26 tell us that God calls each star by its name. The gospel in the stars proponents then must make two assumptions, though they never clearly state them. The two assumptions are

1. That the names that God has assigned the stars (and constellation names) must relate to the primeval gospel
2. That God has shared these names with mankind

These two verses make neither of these claims, so these assumptions go far beyond what these verses

actually say. Note that neither of these assumptions is supportable by any scriptural text; instead they are conjecture that is necessary for the gospel in the stars to be true.

In support of the gospel in the stars, nearly all proponents quote Roman 10:18, which appears to be a direct quote from Psalm 19:4, following the wording of the Septuagint. Romans 10 here is referring to the preaching of the gospel, and verse 18 reads

But I say, have they not heard? Yes indeed: “Their sound has gone out to all the earth, and their words to the ends of the world.”

Proponents of the gospel in the stars reason that since this is a quote from Psalm 19, this necessarily refers to the silent witness of the heavens (stars), and since the gospel is the context of Romans 10, then this proves that there is a gospel in the stars. However, I have yet to find a single commentary on the book of Romans that supports this understanding of Romans 10:18.¹ To place this verse into complete context, let us consider verses 12–18.

For there is no distinction between Jew and Greek, for the same Lord over all is rich to all who call upon Him. For “whoever calls upon the name of the LORD shall be saved.” How then shall they call on Him in whom they have not believed? And how shall they believe in Him of whom they have not heard? And how shall they hear without a preacher? And how shall they preach unless they are sent? As it is written, “How beautiful are the feet of those who preach the gospel of peace, who bring glad tidings of good things!” But they have not all obeyed the gospel. For Isaiah says, “LORD, who has believed our report?” So then faith comes by hearing, and hearing by the Word of God. But I say, have they not heard? Yes indeed: “Their sound has gone out to all the earth, and their words to the ends of the world.”

Notice that this passage deals with the gospel presented to both Jews and Gentiles. And the passage raises a series of four rhetorical questions in regard to the gospel. Those questions are:

1. How can people call upon the Lord if they have not believed?
2. How can they believe if they have not heard?
3. How can they hear without a preacher?
4. How can there be preachers if preachers are not sent?

The answers to these rhetorical questions in reverse order are that human preachers must be sent so that people can hear so that they may believe and thus call upon the Lord. Verse 17 claims that faith comes by hearing words—words from the Word of God. To argue that the very next verse then refers to a gospel without human preachers, without words, and

without the Word of God contradicts the passage.

Granting that Romans 10:18 is a quote of Psalm 19:4, and even if Psalm 19:4 did refer to the gospel in the stars (which as I will soon argue I don’t believe is true), the meaning of any given phrase in a one context cannot be used to override the obvious meaning of the same phrase in a completely different context. Furthermore, it is not uncommon for New Testament writers to quote an Old Testament passage and apply a very different meaning to it. Since all Scripture is given by the inspiration of God, when New Testament writers give a new meaning to Old Testament passages, we can be assured that this is new meaning was imparted by God. In the context of the need for human preachers, the new meaning imparted in Romans 10:18 is that even in Paul’s time preachers already were spreading the gospel across the known world.

Let us now examine Psalm 19. There is a very clear division in Psalm 19 between verses 1–6 and 7–14. This division is so stark as to suggest to some commentators that this particular psalm may have originally been two psalms that were later joined into one, and probably to make a very important point. Ancient Hebrew poetry made much use of parallels and contrasts. Placed in juxtaposition, these two passages compare and contrast what have come to be called general revelation and special revelation. The first part of the psalm presents general revelation, opening with the memorable words,

The heavens declare the glory of God; and the firmament shows his handiwork.

The second part refers to special revelation and opens with the equally memorable words,

The law of the LORD is perfect, converting the soul.

Both are understood to be revelation—each being a way that God reveals truths to us. That is how they are comparable, but notice how they are contrasted. First, there is a contrast in what the revelation is revealed through. In verses 1–6 the revelation is delivered through the heavens; in verses 7–14 the revelation is delivered through the law, testimony, statutes, commandments, and judgments of the Lord—all synonyms for the Scriptures. General revelation is revealed through the Creation; special revelation is revealed through the Bible. A second contrast is what kind of truth is conveyed and what that truth does. The heavens show “knowledge” and the “glory of God.” General revelation provides information about God. In contrast, verses 7 and following indicate that God’s Word does such things as convert the soul, make one wise, rejoice the heart, and warn one of danger. General revelation might awe us with knowledge about God, but special revelation somehow

¹ For instance, I consulted the commentaries on Romans by F. F. Bruce (1985), William Hendrikson (1981), Alva J. McClain (1973), Thomas R. Schreiner (1998), and James M. Stifler (1897).

transforms us with the very nature of God. The third contrast is how the knowledge is transferred. In the New King James Version the third verse reads,

There is no speech nor language, where their voice is not heard.

There are three words that are in italics, indicating that they are not in the original Hebrew. Italicized words are inserted into the New King James Version translation so that it reads better in English. The choice of where words are to be inserted and which words are inserted are editorial decisions made by the translators. There is no debate as to whether the first two italicized words ought to be there in English, for the meaning is not altered if they are there or not, but the first phrase would lack a verb otherwise. However, many translators and commentators doubt whether the third italicized word, “where,” ought to be there. Omitting “where” (as in the Amplified and the New American Standard versions) gives a very different read,

There is no speech nor language, their voice is not heard.

In other words, the testimony of the heavens is a silent, non-verbal, witness. In contrast, the Bible gives us the very words of God, dynamically transforming words. Non-verbal communication can convey information, but it lacks precision and specificity, and thus it is very easily misunderstood. The precision of what special revelation can do, as found in verses 7–14, is in stark contrast to the imprecision of what general revelation can accomplish as found in the first six verses. Even in human interaction we frequently communicate by non-verbal means, for body language and facial expressions can convey thoughts. Unfortunately, those non-verbal communications can be tricky to interpret. We can easily misinterpret these silent messages to mean something other than what was intended. A direct verbal statement clearly is preferable to a non-verbal message, as all marriage counselors advise when they are trying to help a couple whose marriage is in trouble. This makes it likely that even if Romans 1:18 alludes back to Psalm 19, it’s doing so to emphasize this very point. Souls are converted by special revelation, not general revelation. The only way people can be saved is if God’s word is everywhere, and the only way that will happen is if humans spread it everywhere. For even though general revelation is everywhere, it is silent. Even though it is available in general (to all), it only gives us general information about God, not the specific information needed to know God. The gospel is not in the stars.

The dichotomy between general and special revelation is also implied in the other great general revelation passage, Romans 1:19–20.² Those verses read

...because what may be known of God is manifest in them; for God has shown it to them. For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse.

Notice that Romans 1:20 states that there are two things that general revelation tells us, “his eternal power and Godhead.” That is, God exists and is very powerful. There is nothing in general revelation that tells us that we are sinners or that as such we are under the penalty of death or that God sent His Son into the world to pay that penalty for us. To learn these and other things related to salvation, we must turn to special revelation, the Bible. In other words, general revelation can lead us to conclude that there is a Creator and what at least some of His attributes are,³ but general revelation alone is insufficient to lead us to Christ. Furthermore, this proscription from Romans 1:20 would seem to rule out the entire gospel message being found in the stars and constellations (general revelation) as supporters of the gospel in the stars require.

Some supporters of the gospel in the stars claim that Genesis 15:5, when properly interpreted in light of Galatians 3:16, teach the gospel in the stars.⁴ Galatians 3:16 reads,

Now to Abraham and his Seed were the promises made. He does not say, “And to seeds,” as of many but as of one, “And to your Seed,” who is Christ.

They argue that this is a direct reference to God’s promise to Abraham in Genesis 15:5, which reads,

And he brought him forth abroad, and said, Look now toward heaven, and tell the stars, if thou be able to number them: and he said unto him, So shall thy seed be.

The Hebrew word translated “seed” above in Genesis 15:5 is singular, but depending on the context Bible scholars will translate it as either singular or plural (in the latter case often with the word *descendants*). Supporters of the gospel in the stars reason that since Galatians 3:16 explicitly ties this to the singular in Jesus Christ, then the seed of Genesis 15:5 ought to be interpreted in terms of the singular in Jesus as well. They also note that the Hebrew word *caphar* (Strong 1890, #5608) appears twice in Genesis 15:5 translated in the King James Version first as “tell” and then as “number.” They further

² See the discussion of Mayhue 2008, pp. 105–130.

³ Besides Romans 1:18–20, see also Job 12:7–10, Psalm 97:6 and Romans 2:14–16. God’s eternal nature, omnipotence, righteousness and creative intelligence are revealed by physical reality.

⁴ For instance, see Bowden n.d. or Setterfield n.d.

note that this Hebrew word can have two different meanings, either to count numerically or to tell, as in a story. Indeed, *caphar* is translated into English as “declare,” “speak,” and similar words a number of times in the Old Testament. However, *caphar* is translated as “number” or “count” many times in the Old Testament. As with any passage, the context is important in translating this properly. While today the King James Version appears to make a distinction in the two uses of *caphar* in Genesis 15:5, to early seventeenth century readers it probably did not. Indeed, the New King James Version and New International Version render the word *count* in either instance, and the New American Standard translates them first as “count” and then “number.”

How do some supporters of the gospel in the stars interpret Genesis 15:5? While most commentators understand this verse to refer to the miraculous promise to an old man with an old, barren wife and without an heir that God would make his descendants so numerous as to be uncountable, supporters of the gospel in the stars find a different meaning. They claim that God told Abraham to look at the stars and retell the story found in the stars. As Abraham recounted the story of redemption found in the stars that had been handed down to him, God informed Abraham that this was to be the story of Abraham’s seed.

There are several things wrong with this interpretation. First, no commentators of either Genesis or Galatians endorse this interpretation of the supporters of the gospel in the stars. Second, even if Galatians 3:16 exclusively alludes to Genesis 15:5, it could be another example of a New Testament writer, acting under the inspiration of the Holy Spirit, giving a new understanding to an Old Testament passage, but not necessarily the way supporters of the gospel in the stars intend. However, thirdly, Galatians 3:16 is not an exclusive reference to Genesis 15:5. For instance, it appears to be a better fit to Genesis 12:7, the first promise concerning Abraham’s seed. Genesis 12:7 reads,

Then the LORD appeared to Abram and said, “To your descendants [seed] I will give this land.” And there he built an altar to the LORD, who had appeared to him.

Compare the wording of Genesis 12:7, 15:5, and Galatians 3:16, and you will see that Galatians 3:16 more closely reflects Genesis 12:7, not Genesis 15:5. The word *caphar* does not appear in the Hebrew of Genesis 12:7, nor are the stars mentioned. For that matter, the innumerable nature of Abraham’s seed is not mentioned here either. Since the phrasing of Genesis 15:5 is different, it is strained to insist that Galatians 3:16 must refer exclusively to Genesis 15:5. Of course, the promise of Genesis 12:7 is repeated and

expanded in Genesis 13:14–16 and again in Genesis 15:5, both of which mention the innumerable nature of Abraham’s seed. These themes are repeated in Genesis 22:17 and Genesis 26:4. Genesis 22:17 promised that Abraham’s seed would bless all nations. Galatians 3:14 speaks of blessing of Abraham extended to the Gentiles, which provides the context of Galatians 3:16, offering Genesis 22:17 as the Old Testament echo here. By concentrating on only Genesis 15:5 and excluding the other four relevant verses mentioned here, supporters of the gospel in the stars misinterpret Genesis 15:5.

Another passage used to support the gospel in the stars is Genesis 1:14, which tells us that one of the purposes for the celestial lights is to be for signs. What does it mean for astronomical bodies to be for signs? Supporters of the gospel in the stars theory generally believe that this must refer to the gospel message. There are several biblical answers for what these signs may be. First, in Matthew 16:1–4, the Pharisees asked Jesus for a sign. He responded by quoting from some of their own teachings about the sign of a red appearance in the sky to forecast weather, but chided them for not recognizing the signs of the times. Thus, in context, the people well versed in the Old Testament understood that this form of weather forecasting was a kind of sign. Second, as Psalm 8, Psalm 19, and Romans 1:18–20 tell us, God’s existence is revealed through the heavens, constituting a sort of sign. Third, the star that led the magi to the infant Jesus (Matthew 2:1–2, 9–10) was undoubtedly a sign from heaven. Fourth, there will be signs in heaven that reveal God’s wrath (Isaiah 13:9–13; Joel 2:30–31; Matthew 24:29–31; Mark 13:24–27; Luke 21:25–28; Revelation 6:12–17). Thus, in other biblical passages we have at least four types of possible signs in heaven and heavenly bodies that conform to the God-ordained purpose for them. With no clear biblical support for these signs being the gospel in the stars, it is pure conjecture that Genesis 1:14 requires that there be a gospel in the stars.

In summation, the supposed biblical support for the gospel in the stars is very weak, amounting to a very oblique argument at best. And some texts used in support are taken out of context or misapplied. Supporters of the gospel in the stars argue certain biblical passages support their view, but no commentaries of those passages agree with that interpretation. These novel interpretations date no earlier than Rolleston’s work in 1865. Many years ago in college I gained a valuable bit of advice in a class on the Pauline Epistles. Some of our assignments were to write our own short commentaries on some passages. Our professor cautioned us that if we found some understanding of the passage that no one before had found, it likely is because that meaning is not

there. That advice certainly seems to apply here to the interpretations of the supporters of the gospel in the stars.

Rolleston's Methodology

We must next examine Rolleston's methodology, something that I could not do in my earlier paper, because her book was not easily available then. Neither Seiss nor Bullinger included much in the way of references or even allusions to original sources; they merely declared the meanings of various star names and constellations, so one could not judge from them where the material originated or how they derived the meanings of names. Both gentlemen derived their work solely from Rolleston, for they both gave the credit to Rolleston in their books' prefaces. Both men commended her for her diligent work in searching old texts and deciphering the meanings of names in the original languages. Indeed, today's defenders of the gospel in the stars claim that Rolleston studied many ancient sources to find her information. To her defenders, the use of ancient sources adds tremendous weight to the argument for the gospel in the stars. Indeed, if the proper sort of scholarship were applied to original sources, then this would add weight to the case.

A Recent Idea

The primary claim of the gospel in the stars thesis is that the gospel story in the stars was known to patriarchs before the Flood, but in time was forgotten. It is common to claim, for example, that God had to reintroduce the concept to Abraham because it had already been forgotten. Even the gospel in the stars advocates who claim it was revived at the time of Abraham, believe it was lost again by the time of Moses, for that was why God finally inspired the writing of Scripture. This means the gospel in the stars was forgotten by the fifteenth century BC, and possibly as early as 1,000 years earlier than that. Unfortunately, anything approaching complete manuscripts from antiquity is exceedingly rare. A thousand year old manuscript is very old. For instance, the writings of such greats as Aristotle often date more than a millennium after their deaths. We do not even have translations or copies of books by known authors before about the eighth century BC. If the gospel in the stars was antediluvian as claimed, then there were two millennia to garble the message before any sources that we have regarding the names of stars and constellations. Even if the message had been kept clean by a remnant through Abraham and down to Moses, that still leaves a gap of a thousand years. Not only are there no texts preserving the original knowledge of the gospel in the stars, but we know of no sources before Rolleston that claimed

that there ever were such texts, or that any ever lived who believed such things. The first source we know of to make this claim is Rolleston's book. Let me be clear—it is obvious from Rolleston's book that she had no texts that clearly taught her thesis. Instead, she created the meanings to support her thesis without reliance upon any older texts. The evidence we have is most consistent with the gospel in the stars thesis not being an ancient idea at all, but entirely the invention of Frances Rolleston less than 200 years ago.

I ought to mention the contributions of a few other writers who, while they did not write works exclusively dedicated to star names, did touch upon the subject. In 1877, Richard A. Proctor wrote *Myths and Marvels of Astronomy*, which contains some discussion on the origin of the constellations. Proctor was a proficient writer on popular astronomy, as was his daughter, Mary Proctor, who also wrote some on star lore. In 1903 the Italian astronomer Giovanni Schiaparelli (who first saw "canals" on Mars) wrote a well-researched book, *Astronomy in the Old Testament*. This was written in Italian but was followed with an English translation in 1905. And the famous astronomer E. Walter Maunder wrote *Astronomy of the Bible: An Elementary Commentary on the Astronomical References in the Holy Scripture* in 1908, where he discussed biblical references to astronomical bodies. All of these gentlemen were well educated in the Bible and obviously took the Bible very seriously. None of them saw anything resembling a gospel in the stars. In fact, several learned people of the past were quite alarmed with the obvious pagan roots of the constellations and attempted to change the situation. Venerable Bede (672/3—735), an influential English monk, likely was the most learned man in the west in the eighth century. He attempted to reassign each of the twelve signs of the zodiac to the twelve apostles. A similar thing was attempted by the German lawyer Julius Schiller (1580—1627), but he went much further. In 1627, Schiller published the very beautiful star atlas, *Coelum Stellatum Christianum*. In this Christian star atlas, Schiller not only replaced each of the zodiacal signs with one of the twelve disciples, but he replaced all the constellations then in use with biblical or Christian ones. The new northern hemisphere constellations followed New Testament and early Christian era themes, while the southern hemisphere featured Old Testament themes. Schiller's work never gained any following, so he failed in his attempt to redefine the constellations.

Schiller made some direct correspondences with biblical themes, such as Ara, or altar, being replaced by the alter in the Tabernacle, Argo Navis replaced by Noah's Ark, and Columba, or dove, being replaced by the dove sent out by Noah. Supporters of the gospel in the stars make much of Virgo, Taurus, and Aries, but

both Schiller and Bede totally passed on this obvious comparison to biblical themes. The fact that Schiller and others saw no parallel between the Bible and these zodiacal signs is very interesting, if the gospel in the stars theory has any merit. Indeed, Bede and Schiller had a similar concern of those who support the gospel in the stars, concern about the paganism present in the constellations. Their solution was not to attempt to reclaim the original biblical truth, for they did not see this in the constellations. Rather, they sought to remove and replace the paganism with Christian meaning or signification of their own making.

Poor Scholarship

The gospel in the stars thesis owes its origin to what we have from Rolleston, and very little scholarship has been done since, so the scholarship foundation of the gospel in the stars is Rolleston's scholarship. Granted, we must consider that scholarship standards were different in the nineteenth century than they are today, and Rolleston's work is not available to us in its finished form (she died before its completion and was only available in the form of notes). Nonetheless, since gospel in the stars scholarship has not advanced beyond Rolleston, we must examine it. And Rolleston's scholarship does not favorably meet up to modern standards. First, she cites very few of the works that she used. For example, for the Hebrew names of constellations and stars, she lists the Hebrew sources of "Buxtorf's Rabbinical Lexicon, etc." (Rolleston 1865, part 2, pp. 11, 14). This rabbi evidently was Johannes Buxtorf the Elder (1564–1629), and if so, then the book's full title was *Lexicon Hebraicum et Chaldaicum cum brevi Lexico Rabbinico Philosophico* published in 1607. The "etc." must refer to other unnamed lexicons. For Syriac, Rolleston listed "Hyde's Syntagma and Comment, etc." The author must be Thomas Hyde (1636–1703), and his book must be *Syntagma dissertationum quas olim Thomas Hyde separatim edidit*, a collection of unpublished Hyde manuscripts assembled by Gregory Sharpe and published in 1767. For Greek constellation names she listed "Aratus, Ptolemy, etc.," and for Latin constellation names she listed "Cicero, Virgil, Ovid, etc." As before, the "etc." must refer to unnamed other sources. I was not able to determine the exact identity of the other sources that she listed by abbreviated name. It appears that most, if not all, of these sources were in Latin.

Another example concerns her reference to "Albumazer." This is Abu Ma'shar Al-Balkhi (787–886), a leading Persian astrologer (rather than "the great Arab of the caliphs of Granada" as claimed by Rolleston (1865, part 5, p. 15) and accepted uncritically by Gall (1871, p. 232) and Seiss (1882, p. 6) and others after them). Albumasar wrote several books, all of them more about astrology than astronomy.

Most of these works eventually were translated into Latin and used in the west during the Middle Ages. Although Latin versions exist in a few very exhaustive library collections, most of these works have not been translated into English or any other modern language. Since Rolleston and later advocates of the gospel in the stars quote or reference Albumasar, the specific work is not identified, so it is very difficult to check the Albumasar source.

A second problem with Rolleston's scholarship is that even when a particular book is cited, she rarely indicates the location within the work where she discovered the claim. In a number of instances, even with her most specific citations, I was not able to identify the actual source of her claim. A third concern is that there is no good reason to believe that Rolleston read any of her sources in the original language or even checked her claims with scholars competent in those languages. We do not know much about the life of Rolleston. Was she educated in ancient and Middle Eastern languages? We do not know, though it is unlikely that she was. Every one of Rolleston's sources that I was able to identify was available in Latin or a Latin translation in Rolleston's day. Being an educated woman of two centuries ago (she lived to great age, and her book was published posthumously), Rolleston almost certainly could read Latin, but it is unknown if she had any expertise in any other ancient languages. It is important to note that if she was not proficient in the languages involved, then she hardly could produce original research of excellent quality as her supporters generally assume.

Lack of Caution

Rolleston and her followers attach too much uncritical acceptance of the sources. Perhaps the most important example is their use of Ptolemy, for nearly everything we know about the history of astronomy before the time of Christ comes to us through the work of Claudius Ptolemy (the dates of his birth and death are uncertain, but he flourished around AD 140). Ptolemy was a Greek Alexandrian astronomer who wrote *Syntaxis*. This 13 volume work not only included his understanding of the universe, but also included his understanding of what everyone before him thought about astronomy. We have very few other sources for this information, so if Ptolemy got it wrong, then we have it wrong. If that isn't enough of a concern, with the breakup of the Roman Empire Ptolemy's *Syntaxis* apparently disappeared in the west. Fortunately, the Arabs translated the work into Arabic. In fact, it so impressed the Arabs, that they referred to it as "the greatest." In fact, when the work finally made it back into western Europe and was translated from the Arabic into Latin, it came to be known not by its original title of *Syntaxis*,

but by the Latin transliteration of the Arabic for “the greatest,” the *Almagest*. Ptolemy’s work is historically significant, so rare book collectors frequently have interest in it, but copies that generally sell are late medieval or early renaissance. Note that many are Latin translations of the Arabic translation of the Greek, and that they date more than a millennium after Ptolemy. Earlier copies apparently do not exist. Among the Arabic and Latin manuscripts of the *Almagest* that exist, there are many textual variants, which is common for problem for such manuscripts. Neither Rolleston nor her followers express the appropriate caution when referring to claims that come to us through authors such as Ptolemy.

False Antiquity Assignments

Several of Rolleston’s sources were not deriving from the ancient wisdom she assumed they were. For example, one of Rolleston’s most important medieval sources is Rabbi Avraham Ben Meir Ibn Ezra (1092 or 1093–1167). Note that different authors identify this man by various spellings and combinations of his titles and names—Rolleston used Aben Ezra. Aben Ezra was a Jew from the Iberian Peninsula, but traveled extensively in Europe, North Africa, and the Middle East. He is known as a prolific poet, Jewish commentator, and writer on various subjects such as math, science, and astrology. It is important to know that he wrote his works in Hebrew, and many of his science writings were translations of Arab manuscripts available in Moorish Spain and North Africa. Presumably he translated at least portions of the *Almagest* and Arabic astronomical lore into Hebrew. He was very popular to his readers, because his Jewish audiences generally were ignorant of these topics. This is very important, because rather than informing us about ancient Jewish astronomical lore, he may have introduced astronomical lore to medieval Jewish people. This is an important distinction, because Rolleston apparently believed that Aben Ezra knew much about ancient Jewish astronomy, when in reality it is extremely doubtful that he knew much about it at all.⁵ In other words, while Rolleston assumed that Aben Ezra was a source of ancient Hebrew astronomical lore, he actually was a conduit of astronomical lore from ancient Gentile sources to medieval Jews.

A second example is Ulugh Beg (1393 or 1394–1449), a Timurid leader, mathematician, and astronomer. Of Mongol descent and born in Persia, Ulugh Beg spent most of his life in Samarkand, where he built an observatory. Perhaps his greatest contribution was an updating and correcting of the *Almagest*. His corrections consisted mostly of re-

measuring stellar positions at his observatory, but he also included updated Arabic names for many stars. His catalog of nearly a thousand stars was the first catalog since Ptolemy’s. There are several important points about his work. First, being Muslim, he wrote and worked with Arabic sources, primarily the *Almagest*. Second, he contributed new observations, but he did very little to inform us on ancient star lore. He lived more than a millennium after Ptolemy, so one would expect Ptolemy to be much closer to ancient sources than Ulugh Beg was. For a long time, most scholars thought that Ulugh Beg transmitted no Arabic astronomical lore, but of late, scholars tend to think that he did further some Arabic lore prior to the Muslim conquest of the Middle East in the seventh century, though it is difficult to separate out exactly what content this would have been (Kunitzsch and Smart 2006). Nor is it clear that anything he might have added pre-dated Ptolemy’s time, rather than being from the later Christian era. There is no evidence that Ulugh Beg had access to any ancient sources that pre-dated Ptolemy. Rolleston may have assumed too much and thus may not have properly assessed the work of Ulugh Beg. Consider this statement:

Ulugh Beigh, a Tartar prince and astronomer who lived about the middle of the fifteenth century, is considered to have transmitted the ancient Arabian science (Rolleston 1865, part 2, p. 14).

Rolleston does not define what she means by “ancient Arabian science,” but it easily could imply to her readers a lore predating the Christian era. If true, then Ulugh Beg’s writing would be very significant indeed in deciphering ancient meanings. But, alas, it is unlikely that Ulugh Beg’s writings contributed anything at all from the pre-Christian era. Instead, he corrected the earlier Arab translation of the *Almagest*, done by several scholars, the most notably being ‘Abd Al-Rahman Al Sufi (903–986). Thus, since both Aben Ezra and Ulugh Beigh derived their work from Ptolemy, it is unlikely that any truly ancient (pre-Christian and pre-Ptolemy) lore is found here. Al Sufi is credited with including with his translation of Ptolemy the Arabic names of stars from the time prior to western influence. However, the western influence arrived at about the time that Al Sufi did his translation, so earlier Arabic names may only go back a few centuries. To be truly ancient and significant in the way that Rolleston meant would require that his Arabic names go back two millennia prior, which is extremely doubtful. Rolleston’s assumption that Ulegh Beg’s Arab names are from antiquity is not supported by any scholars of this and related works except in a few specific instances, but she appeared to

⁵ I confirmed this by discussion with Ernest Jenkins, Assistant Professor of history at The University of South Carolina Lancaster and specialist in the history of medieval Spain.

assume that all the Arabic names were ancient. This is a very serious deficiency, and it greatly diminishes the weight of her argument.

Hebrew Word Roots

In her explanations of her tables, Rolleston stated: The names are here explained on the supposition that the first language was given by the Creator to the first man, conveying ideas to the mind by sounds, as impressions of form and colour are conveyed by sight. In all languages these sounds are traceable, conveying the same ideas. In the dialects of the most ancient and earliest civilized nations they are the most recognizable: in those the most barbarous the most obscured. This primitive language appears to have been spoken by Noah, from the names given by him to his sons. In the confusion of the lip at Babel, pronunciation, and not words or roots, were altered. This may be inferred from the presence of the Hebrew roots in the dialects of all nations” (Rolleston 1865, part 2, p. 3).

Thus, Rolleston assumed that Hebrew is the closest language to that of Adam. This is common belief among creationists, but it is not necessarily true. Furthermore, few would agree with her assumption that pronunciation and little else was altered at Babel. I have posed this question to several highly educated Christian linguists involved in the work of translating the Bible into languages that have never had the Bible. They universally dismiss this possibility. Using these assumptions, Rolleston apparently searched for homophones in Hebrew to match star and constellation names (Rolleston 1865, part 2, pp. 1–2). For instance, Rolleston reasoned that Latin derived from Etruscan, which derived from Assyrian, and since Assyrian was a Semitic language, it probably derived from Hebrew (Rolleston 1865, part 2, p. 1). Thus, Rolleston thought that she could find meanings of Latin names from Hebrew roots. In some cases, Rolleston claimed to find root meanings in other Semitic languages; one could only guess that she resorted to this when she found no satisfactory match to any Hebrew word. Given the highly speculative nature of this approach, her conclusions on particular meanings from Hebrew and related Semitic languages are very suspect at best. Yet, there is no doubt expressed in her root meanings, nor in those who have followed her lead.

As one example (among many) of Rolleston’s Hebrew word root methodology, consider the meaning that she found for the star Deneb. Deneb and other star names containing “deneb” (for example Denebola and Deneb Algeidi) are not found in Ptolemy and apparently came to us from the Arabs. *Deneb* in Arabic means tail, and each case star names with “deneb” in them mark the

tails of the creatures of which they are a part. This seems to be an adequate explanation of the names. However, because Rolleston sought the original meanings of words from homophones in Hebrew, she reasoned that *Deneb* was a perversion of the Hebrew *diyn*, which means “judge” (I will discuss this more fully later). At best, Rolleston could legitimately offer her interpretations only as a possible argument. Yet, she confidently stated her interpretations with the conviction of fact, and all too many of her followers assumed that she had uncovered the true meanings of star names. As two more examples, in my previous paper, I demonstrated that Rolleston had found ancient meanings in the star names Svalican and Rotanev, names that first began to appear on star charts only in her lifetime. If Rolleston found such specious ancient meanings in those two star names, it ought to cause us seriously to question her many other meanings.

In summary of Rolleston’s methodology, she did not, in spite of what many of her supporters claim, find her meanings in ancient sources. Instead, she assumed that Hebrew was, or was closest to, the original Adamic language. With this assumption, she proceeded to look for Hebrew homophones in star and constellation names in various languages. If she had offered her interpretations of names in the form of a possible argument within her assumptions, this might have been acceptable. However, she merely asserted these meanings, all the while claiming or at least implying that she had found these meanings in ancient texts. If the sources that she supposedly consulted clearly taught the meanings that she claims, why did no other investigator of star names before her (of which there were many) ever learn these meanings? The earliest sources that Rolleston listed are medieval; none are ancient. While in general statements Rolleston mentioned the work of older sources such as Aben Ezra and Ulugh Beg, she did not reference or footnote any of them for her meanings. This is remarkable, for if one truly relied upon allegedly ancient sources, it is imperative that those be fully referenced. If she had truly found these meanings preserved in ancient texts, she utterly failed to document them. This is strange, for it was standard practice in scholarly works to document things carefully in the early nineteenth century.⁶ Thus, her scholarship in this matter is seriously lacking.

Modern Scholarship on the Origin of Constellations

In modern scholarship there is no consensus on who originated the constellations. The dominant belief is

⁶ Suggested by Terry Mortenson, Answers in Genesis historian of science.

that they originated with the ancient Babylonians (not the neo-Babylonian empire). From the Babylonians the constellations were transmitted to the Egyptians, and the Egyptians in turn passed them on to the Ancient Greeks, though there may have been some direct transmission from the Babylonians to the Greeks. Shortly thereafter, the Romans absorbed much of the constellation lore from the Greeks. A popular variation on this history is that the ancient Minoan civilization originated the constellations and passed them on to the Babylonians. The main point in favor of the Minoan theory is that Hydra the sea snake, which is the longest constellation at more than 100° long, spanned the celestial equator about the time that the ancient 48 constellations were codified in the late third millennium BC, and the Minoans were a dominant culture at that time, assuming conventional historical dating. Precession of the equinoxes has since moved Hydra from this position. The Minoans were a seafaring people, so this would have been helpful for navigation.

I ought to emphasize that this is conjecture, and indeed, the ancient origin of the constellations that have been handed down to us are a matter of conjecture, for the first mention of the constellations that we have in literature date from the first few centuries BC, though most authorities believe that the constellations predate the first mention considerably. Not only do most speculations about constellations assign their origin to third millennium BC cultures, but the best fit of the classic constellations to the processional cycle is in the third millennium BC. There is too much time and too many cultural transfers between the likely origin of the constellations and our oldest sources about them to be sure about their real origin.

Whereas most of the star names are Arabic (see below) most of the constellation names are Latin. The 40 or so relatively modern constellations bear Latin names, for Latin had been the preferred language of science for some time when many of those were named. However, even most of the 47 remaining of Ptolemy's 48 original constellations bear Latin names, usually Latin translations of the Greek words that Ptolemy used. For instance, "Ursa Major" and "Ursa Minor" are Latin for the large and small bears, and "Canis Major" and "Canis Minor" are the large and small dogs." This is true of the zodiacal signs as well—"Leo" is Latin for lion, and so forth. We often say "Virgo, the virgin," or "Cygnus, the swan," but this is redundant. Properly, we ought to say "Virgo," or "the virgin."

According to Greek tradition, it was Eudoxus (410 or 408–355 or 357BC) who introduced the constellations to the Greeks from the Egyptians. His work on the constellations was the *Phaenomena*. Although other authors mention Eudoxus and his

works, none of the works of Eudoxus have survived. The Greek poet Aratus (315/310—240BC) wrote a poem by the same name and is loosely based upon Eudoxus' *Phaenomena*. The only surviving work of Hipparchus (190—120BC) is his critical commentary on the *Phaenomenae* of both Eudoxus and Aratus. The only fragments we have of the text of Eudoxus' *Phaenomena* consist of the quotations in this lone surviving work of Hipparchus.

Aratus' *Phaenomena* poem proved to be very popular in the Greek and Roman worlds. Even the Apostle Paul quoted from it in Acts 17:28. There were several Latin translations of Aratus' *Phaenomena*, the most famous being that of Cicero (106—43BC). A number of English translations of Aratus' *Phaenomena* exist, and some are online. In many respects, though, Aratus' *Phaenomena* is overrated. First, it is very clear that Aratus had very little, if any, knowledge of astronomy, for there are technical astronomical problems with various portions. Second, we must not forget that this is poetry and thus ought not to be treated as a scientific treatise. In similar manner, one would not seriously take Longfellow's poem, "Paul Revere's Ride," as an historically accurate description. Third, there is not much detail contained in Aratus' *Phaenomena*. Contrary to popular belief, only a few names of stars are actually mentioned in Aratus' *Phaenomena*. The significance of Aratus' *Phaenomena* is that it indicates that the constellations were well established and thus quite old by the third century BC. However, that does not mean that the human recognition of the constellations and understanding of any message in them date from the beginning of creation, as some supporters of the gospel in the stars imply. Eudoxus' *Phaenomena* may have taught us much more, but we don't have access to his work.

Modern Scholarship on the Origin of Star Names

The most significant source of ancient astronomical information is the already mentioned *Almagest* of Ptolemy. There are several English translations of the *Almagest* available, so we can see what Ptolemy wrote about. His books 7 and 8 contain a catalog of 1,022 stars. Many people erroneously think that Ptolemy recorded the names of most or even all of these stars. Actually, he recorded the names of only five stars. For the 1,022 stars in his catalog, Ptolemy recorded the magnitude, ecliptic longitude and latitude, and also described the locations of the stars within their respective constellations (descriptions such as "the shoulder of the centaur"). The magnitudes and ecliptic coordinates permit us to unambiguously identify most of the stars. The descriptions of the locations of the stars within the constellations allowed much

later artists and cartographers to produce figures of the constellations on atlases, planispheres, and star globes. One of the most beautiful and best known of these is Johannes Bayer's *Uranometria* in 1603.

After the Muslim conquest, the Arabs began widely to use Ptolemy's *Syntaxis*, which quickly became known as the *Almagest*. The first translations of the *Almagest* into Arabic were in the ninth century. Most of the star names we have today are Arabic, and probably date from this period when Ptolemy was popular in the Arab world. By the twelfth century, the *Almagest* began to reappear in the west. The *Alphonsine Tables*, a book that proscribed how to compute the positions of the sun, moon, and planets in the Ptolemaic model was produced in Spain. This work drew heavily upon the *Almagest*. These tables originally were written in Spanish, which is very interesting, because it was highly unusual for a scholarly work to be published in a common language at that time. Eventually the tables were translated into Latin. The *Alphonsine Tables* were popular in the west for three centuries, but were eventually abandoned with the adoption of the heliocentric model. Some star names that we have today come from the *Alphonsine Tables* as Spanish/Latin corruptions of the Arabic.

The star names that have been handed down to us are a mishmash of different derivations. Most of the names are Arabic, but a few are from ancient Greek and Roman names, and some Latin names arose in the medieval period. A few names are of fairly recent origin. Since many of the names have undergone translation and transliteration, there are wide variations in spelling, and there is some doubt as to the origin and meanings of some names. A number of attempts to find the origin and meaning of star names began about 1600. One of the more exhaustive books was the 1809 book by Ludewig Ideler. This book, in German, remained a classic source for 150 years, including while Rolleston was engaged in her research. In 1882 W. H. Higgins published a short book (in English) on the meanings of star names, largely relying upon Ideler. Higgins' book, like Rolleston's, amounted mostly to notes, and the author intended to expand this work with a later book but never did.

In 1899 Richard Hinckley Allen published his definitive book on the lore, history, and meanings of star names and the constellations. Allen prepared a revision some years later, but this revision was never published. Instead, the 1936 edition cleaned up many of the typographical errors of the original edition. This book has remained in print since a 1963 Dover edition, and it has come to be viewed as the authoritative source on the meanings of stars names. However, in recent years, the book has come into some criticism.

One major concern is that Allen was not a scholar of Arabic, and as such, he relied heavily and uncritically upon Ideler. But Ideler did not have access to the best Arabic sources. Most earlier historians of astronomy had endorsed Allen's assessment that the Arabic names were nothing more than transliterations of Ptolemy's descriptions of the locations of stars within their respective constellations. However, now historians think that at least a few star names that the Arabs already had prior to contact with Ptolemy's work may have been overlain in the *Almagest*. In recent years, Paul Kunitzsch, who is an Arabic scholar, has researched the history and origin of star names, and his work currently is considered the best on the subject. The most available source for Kunitzsch's work is the brief book by Kunitzsch and Smart (2006). For the best meanings of star names, I will use Allen, but I checked each meaning with Kunitzsch and Smart, and I will note any variance between the two.

Assumptions Required for the Gospel in the Stars

Let us summarize the assumptions that supporters of the gospel in the stars theory must make.

1. God not only named the stars (Psalm 147:4; Isaiah 40:26), but He shared those names with man (Adam).
2. God's names for the stars convey the gospel message.
3. There was a need for the gospel message prior to the giving of that message in the written Word.
4. The original language of man was Hebrew.
5. At the time of Babel, only pronunciation changed; thus Hebrew roots were preserved in all languages.
6. Star names that we have today are ancient in origin, dating from the earliest times and thus reflect the early meanings delivered by God.

There is an alternative to point 2, that God revealed the gospel message to Adam and that either he and/or Seth named the stars and constellations to reflect that message. This is less popular among supporters of the gospel in the stars theory, but they frequently quote Josephus concerning Adam and the origin of the constellations. Josephus gave credit to Adam and/or Seth apart from any mention of God's help.

Therefore, these assumptions allow this methodology:

1. The original meaning of a star name is determined by identifying a homophone and meaning in Hebrew and other Semitic languages.
2. Vowels can be ignored, because of differences in pronunciation and vowel points were added to Hebrew much later.

Note that all six assumptions must be true for the gospel in the stars theory to be true. None of

these assumptions can be proven, so they truly are assumptions. If any of the six assumptions is not true, then the gospel in the stars is not true. What about these assumptions?

The first assumption asserts that God has shared His names with us, but there is no scriptural basis for this belief. The two verses cited merely state that God has named the stars (and the verses imply all the stars), and we know this through the specific information given in these two divinely inspired verses. But to conclude that these two verses necessarily imply that God shared those names with Adam goes far beyond what the verses say and reads too much into them. Since no names of individual stars are in the Bible, the idea that God shared any of His names for the stars with man must necessarily be extra-biblical. If such extra-biblical revelation existed, all sorts of questions about the nature of special revelation and the preservation of that revelation arise. For instance, one might question what other extra biblical writings were inspired and why have they not been preserved. These questions can erode confidence in the doctrine of revelation. Interestingly, while no individual stars are unambiguously named in the Bible, there are names of a few groups of stars mentioned in the Bible (for example, Orion and the Pleiades), but advocates of the gospel in the stars tend to ignore those, opting instead to find meaning in Hebrew for the non-biblical (and non-Hebrew) names. But this is inconsistent, for if God has ordained certain names for groups of stars, does it not stand to reason that He would use those names in His divine revelation, the Bible? Then why not search for meaning in those biblical names rather than search for meanings in non-biblical names?

The second assumption is the key one concerning the gospel in the stars. No biblical passage clearly teaches this, and we have already seen that the attempted proof texting of this reads far too much into the passages and has no support from commentators.

The third assumption is related to the very old question concerning the fate of those who have never heard the gospel as explained in the New Testament. Though this has been discussed in numerous places, there is no totally satisfactory answer to this question. I ought to emphasize that

1. every person who has ever lived has had the witness of creation and the witness of conscience (Romans 1:18–20; Romans 2:14–15; Job 12:7–10; Psalm 19:1 [cf. Romans 10:18]; Psalm 97:6; Acts 14:15–17; Acts 17:24–29), and
2. if a person responds positively to the truth he has, God will get more truth to him, even miraculously if necessary (for example, Acts 10:1–5) and
3. no one deserves to have more truth than creation

and conscience supplies and any more truth than anyone does receive is the result of grace. God is just, even if he gives no more truth as Romans 1:20 makes clear.

As for the transmission of a salvation message prior to the written Word of God, how did any of God's instruction to man come down to the patriarchs? We do know that God directly spoke to certain individuals such as Adam, Cain, Noah, Abraham, and Moses. God may have directly revealed Himself to any number of other individuals not recorded in Scripture. Furthermore, we cannot discount the oral and even written testimony (though not inspired as with Scripture) of followers of God. These are only a few possible ways that this information from God could have been conveyed apart from a gospel in the stars. And keep in mind that the gospel in the star explanation for this question dates no earlier than 1865.

The fourth assumption about Hebrew or some form of Hebrew being the primordial language has the greatest indirect support of these six assumptions, and it enjoys a broad range of support amongst Christians. The indirect argument for this is two-fold. First, the names of many of the patriarchs convey information in Hebrew, though there is some disagreement about the exact meanings of some of those names (for example, Methuselah). It seems reasonable that these names must have had meaning in the original language, unless those names themselves were translated into Hebrew from the original language. Second, what might be called “toledoth theory” is one of the more popular theories of the origin of Genesis. This view is based on the eleven occurrences of the Hebrew word *toledoth*, which is translated “these are the generations” or “this is the account,” scattered through Genesis.⁷ It is proposed that this indicates that Moses wrote Genesis on the basis of accurate oral tradition or written documents (perhaps written by the names associated with each toledoth) passed down through the patriarchs from Adam to Moses. Key patriarchs kept a history of their lineage, and those same patriarchs added their own stories to that history. If the pre-Babel writings of the patriarchs were in some language unknown to Moses, then he could not have collated those records into the book of Genesis. On the other hand, some Christians believe that Sumerian may have been the pre-Babel language. The Sumerian civilization is the earliest known large civilization, and the Sumerian language is a language isolate. That is, it is a language with no known relatives. This suggests that it might have been the pre-Babel dispersement language.

The fifth assumption that only pronunciation was

⁷ Genesis 2:4, 5:1, 6:9, 10:1, 11:10, 11:27, 25:12, 25:19, 36:1, 36:9, 37:2.

changed at Babel is explicitly stated by Rolleston. Qualified Christian linguists find no support for this assumption. The sixth assumption about the star names that we have dating from the beginning of creation is very doubtful. The earliest documentation of only a few star names goes back to Aratus in third century BC. Most star names have documentation that is medieval in origin. We can document that some star names are of very recent origin. In the first paper I showed that Rolleston found ancient meanings in some of those recent names.

Problems With the Zodiac in the Bible

Rolleston found many zodiacal connections in the Bible. For instance, she claims that there are allusions to the twelve signs of the zodiac in Jacob's blessing on his twelve sons in Genesis 49 (Rolleston 1865, part 1, p.17). There are at least two problems with this. First, one is hard pressed to find any commentary on Genesis to support this interpretation. Second, the alleged parallels between the blessings for each son and the zodiacal signs are extremely creative. The only obvious possible connection is the one supposedly between Leo and Judah in that Judah is referred to as a lion. However, there is not even a hint of the other 11 connections that Rolleston makes to Genesis 49. Rolleston speculated that each son carried a symbol from one of the signs of the zodiac and that Jacob pointed to each zodiacal symbol in pronouncing his blessing. This is entirely speculation on Rolleston's part, and I have found no commentary that mentions, let alone endorses, this idea.

Rolleston also claimed the same correspondence between the tribes of Israel and the signs of the zodiac is contained in the final blessing of Moses in Deuteronomy 33 (Rolleston 1865, part 2, p.38). Here and elsewhere (Rolleston 1865, part 1, p.12, part 2, p.48) Rolleston further claimed that in the wilderness each of the tribes carried a standard with the tribe's respective zodiacal sign inscribed upon the standard. It is true that the tribes had standards, or banners, (Numbers chapters 2 and 10), but Scripture does not record what was on the standards. In the latter passage, Rolleston (part 2, p.48), credits Josephus with this information. I have searched Josephus's *Antiquities of the Jews* and *Wars of the Jews*, but I have not been able to find this; I believe that it is not found in Josephus. Rolleston offered no other references for any of this. Sadly, Seiss and Bullinger uncritically repeated this claim concerning the zodiacal connection of each tribe, and both fully endorsed the specious claim that the tribal standards in the wilderness wandering were zodiacal. For instance, Bullinger (1893, p.17) confidently stated,

And it is more than probable that each of the Twelve Tribes bore one of them (a zodiacal sign) on its

standard.

It is time that mythical nonsense like this ceases.

Rolleston claimed that each of the 12 stones on the breastplate of the high priest contained an inscription of the zodiacal sign of the respective tribes (Rolleston 1865, part 2, pp.45–46). This is contradicted by the clear text of Exodus 28, which informs us that each stone bore the name of a tribe. Josephus does mention something resembling Rolleston's claim in book 3, chapter 7, section 7 in his *Antiquities of the Jews*. However, book 3, chapter 7, section 5 gives a clear description of the breastplate that closely follows Exodus 28. The introductory passage to section 7 makes it clear that in that section Josephus was attempting to answer questions from secular sources. In that section he speculated that each of the stones may correspond to the months of the year or to the zodiacal signs, though it is not clear if he is offering his own opinion or the opinion of Jews of his day. Either way, Josephus did not mention any zodiacal signs on the stones, and thus the much clearer Josephus passage and Exodus 28 ought to trump any odd speculations.

It is likely that Rolleston's erroneous claim that Josephus stated that the banners of the tribes in the wilderness bore zodiacal signs stemmed from a misunderstanding or further inference about the breastplate stones. Again, Josephus did not state that the stones bore zodiacal signs. Rather, he opined that the stones, being 12 in number, might have corresponded to the 12 zodiacal signs. Once one assumes that this implies that each stone had a zodiacal inscription, one for each tribe, it is very easy to infer that the banners must have had those same zodiacal signs on them as well. The fact that Josephus, being a Jew, did not understand that the 12 stones represented the 12 tribes and opined instead that they might have referred to the 12 zodiacal signs indicate that Josephus had no real problem with astrology.

It is true that there is some Jewish tradition connecting each of the 12 tribes to a particular zodiacal sign. However, sources for these associations date very late, from the Middle Ages, which suggest that the correspondences are not ancient at all. Furthermore, there is no single system of correspondence. Instead, different sources claim different systems of assigning particular signs to each tribe. If the identification of each tribe to a unique sign were from the patriarchs or the wilderness wandering, there ought to be a unique identification of each tribe.

To further support this connection between the zodiacal signs and the 12 tribes, recently some advocates of the gospel in the stars have pointed to zodiacal floor motifs found in ruins of several AD fourth–sixth century synagogues. Most notable is the sixth century

Beth Alpha Synagogue in Israel. Some have gone so far as to claim that some or all of these zodiacal signs are explicitly identified with particular tribes in these mosaics. However, this is not true, for the inscriptions are the names, in Hebrew, of the zodiac signs. For instance, the sign for Leo has the Hebrew inscription *aryeh*, meaning lion. Not only is there no connection made to the Old Testament, but at the center there is a depiction of Helios, the Greek god of the sun. One has to ask, assuming that these ruins indeed are synagogues, why such blatantly astrological and pagan depictions are found in a synagogue, when such things were forbidden to the Hebrews? The best guess is that these mosaics merely were decorative art. By the sixth century, many Jews had become thoroughly Hellenized to the point that the Old Testament prohibitions against astrology and paganism were of no consequence. At any rate, the existence of these motifs in what are supposed to be ruins of synagogues do not make the case for the association of a zodiacal sign to each of the 12 Hebrew tribes.

Rolleston also found zodiacal connections to names in the Old Testament. She claimed a zodiacal connection to the names of the 12 sons of Jacob (Rolleston 1865, part 2, p.37), as well as the first 12 patriarchs (Rolleston 1865, part 2, p.32). The latter is forced in that there were ten antediluvian patriarchs, but she had to include two post flood patriarchs to get the number to 12. She also found connections between zodiacal signs and types of the Levitical law (Rolleston 1865, part 2, pp.49–50), cherubic forms in prophecies (Rolleston 1865, part 2, pp.51–53), types of the apocalypse (Rolleston 1865, part 2, pp.58–59), and prophecies of the Messiah (Rolleston 1865, part 2, pp.60–61). This sort of argument is contagious, as witnessed by Seiss' odd ramblings about the alphabet and the stars (Rolleston 1865, part 2, p.23). Besides the bizarre claims here, it also is not clear what the point of these connections, if real, was. Just how does this connect to the gospel in the stars? These weird, mystical speculations ought to cause proponents of the gospel in the stars pause.

Problems with Rolleston's Decans

Rolleston arranged 48 constellations into decans of three constellations associated with each of the 12 zodiacal signs. Although many ancient cultures referred to decans, they are defined differently than the way Rolleston uses the term. These cultures divided each astronomical sign into three decans. Since there are twelve signs circling the sky, each sign stretches over approximately 30° of the ecliptic. Thus, each decan spans roughly 10° along the ecliptic. Since it takes approximately 360 days for the sun to complete a circuit with respect to the stars, the sun occupies each decan for roughly ten days. In fact,

the word *decan* derives from the Latin and Greek roots from which we get the word *decade*, meaning “ten.” In most ancient cultures each decan was ruled by some other astronomical body. In some systems, as in ancient Egypt, each decan was ruled by a particular star that rose with the decan. In other systems, it was the sun, moon, or one of the five naked-eye planets. The decans are directly connected to ancient astrology; in modern times the decans have fallen into disuse among astrologers. One of the more recent discussions of decans is that of William Lilly in his three-volume work, *Christian Astrology*, originally published in 1647. Lilly briefly mentioned decans in various places, but discussed them in most detail on pp.103–104 of volume 1, following an arrangement that he attributed to Ptolemy. In place of the more modern term decan, Lilly used the term *decanate*, *decurie*, or *face*. His table on p.104 gives the arrangement of the ruler of each decan.

One problem with gospel in the stars publications is the rejection of the logical and straightforward meaning of *decan*. Rolleston (1865, part 2, p.14) wrote that the word comes from the Hebrew word *dek-ak'* (Strong 1890, #1855) meaning “to break into pieces.” Seiss (1882, p.18) went on to claim that the word *deck*, as on a ship, comes from the same root. This is not correct, as any good dictionary traces the word *deck* back through Dutch to German to Latin and Greek from a word meaning “to cover.”

A more serious problem is Rolleston's definition of a decan as a set of three constellations associated with each zodiacal constellation. Since there are 48 constellations in Ptolemy's (and Rolleston's) scheme 12 zodiac constellations plus three decan constellations for each zodiac constellation accounts for all 48 constellations. Rolleston's definition of decan appears to originate with her and not with any ancient astronomers. Rolleston (1865, part 2, p.14) stated, “The Decans are here arranged from a work by Albumazer, Flor. Astro., a Latin translation of which is in the Library of the British Museum.” Later, Rolleston (1865, part 4, p.12) mentions this work again and there offered quotes from Albumasar. This portion of her book is a bit disorganized (she died before this portion was completed, according to an “advertisement” inserted at the beginning of part IV), so it is not entirely clear whether the quotes offered here are indeed from this particular work of Albumasar or some other (Rolleston mentioned no others). Rolleston probably did her own translation of this work from the British Museum Library copy.

The “Flor. Astro.” must be the *Florum Astrologie*, or, in English, “The Flowers of Astrology,” though this work is better known as *Liber Florum*, or *Book of Flowers*, a treatise on mundane astrology. The “flowers” in the title refers to “choice selections”

rather than to plants. Fortunately, there is an English translation of the Latin translation of *The Book of Flowers* (Holden 2008), and apparently it is the only one of Albumasar's works that has been translated into English. I have read this book, and I found no description of decans in it, let alone the arrangement that Rolleston presented. For that matter, no non-zodiacal constellations are even mentioned. Therefore, it is a mystery as to where her arrangement of these decans came from. Given the generally poor manner that Rolleston handled sources and her ability to create false history, I conclude that Rolleston probably misunderstood a portion of Albumasar and that she essentially created her arrangement of the decans herself.

How might Rolleston have created these decans? I offer the following scenario as a possibility. *The Book of Flowers* does mention triplicities of four of the zodiacal constellations (Holden 2008, pp. 14, 20). For instance, the latter passage referenced has a statement beginning with, "When Saturn is lord of the year and in Taurus or its triplicity..." Perhaps Rolleston thought that the triplicities referred to three ancillary constellations that were applied to each of the zodiacal constellations. If this is how Rolleston arrived at her decan designations, then she completely misunderstood what Albumasar was saying. Albumasar mentioned only the first four zodiacal constellations, Aries, Taurus, Gemini, and Cancer in the context of triplicities. This is because each of these four signs had two other zodiacal signs assigned to its triplicity. Astrologers divide the twelve signs into four groups corresponding to the four ancient elements, fire, earth, air, and water. The fiery signs are Aries, Leo, and Sagittarius; the earth signs are Taurus, Virgo, and Capricornus; the air signs are Gemini, Libra, and Aquarius; the water signs are Cancer, Scorpius, and Pisces. Each of these four groups consists of three triplicities; this is what is meant by a triplicity.

Yet another problem is how Rolleston knew which three constellations were to be combined with each zodiacal sign. For instance, how did she know that the two bears and Argo (the one now defunct Ptolemaic constellation) were to be associated with Cancer? Rolleston did state (Rolleston 1865, part 5, p. 15) that "...the three decans attributed to each sign come to the meridian with it..." Therefore, Rolleston likely determined when some prominent portion of each of the other 36 constellations crossed the meridian along with each zodiacal constellation during some ancient epoch.

Seiss (1882) rearranged the quotes allegedly from Albumasar and added an additional quote from another source. Seiss normally referenced quotes, but he did not reference the Albumasar quotes, so

it is not clear if he checked these supposed quotes himself or merely relied upon Rolleston to correctly quote Albumasar. If one uncritically reads what Seiss wrote here about decans, it is convincing. However, once one realizes that there is no basis for the decanal arrangements as put forth by gospel in the stars advocates, then the quotes do not amount to much. That is, one could easily understand these quotes in the context of the proper view of the decans being ten degree increments within each zodiacal sign. In fact, Seiss concludes his discussion of the decans with this interesting sentence:

And after the closest scrutiny, those who have most thoroughly examined and mastered the subject in its various relations entirely agree with the same enumeration, which I therefore accept and adopt for the present inquiries into this starry lore, sure that the particular examination of each sign, with the Decans thus assigned to it, will furnish ample internal proof that this enumeration is correct according to the original intention.

Here Seiss appeals to self-consistency for ultimate proof of the arrangement. That is, the three other constellations supposedly associated with each zodiacal sign complement each other so well as to demonstrate that the arrangement is true. Given how much of a Rorschach test that much of this amounts to, one probably could find connections in any number of possible combinations of constellations. However, Seiss' statement here appears to me to be a tacit admission of how poorly founded the arrangement of decans set forth in his book actually is.

Please note that my attempt to explain how Rolleston established her system of decans is conjecture. I cannot find a precedent for her decans in the literature, and this arrangement appears to be unique to the gospel in the stars, suggesting that this arrangement originated with Rolleston. If anyone can produce a clear reference from Albumasar or from any other ancient or medieval source of the arrangement presented by Rolleston thus showing that her arrangement of the decans predated her, then I will gladly withdraw this. It is regrettable that all gospel in the stars advocates have uncritically accepted Rolleston's decans as established fact. It is amazing that in the century and half since Rolleston introduced them that no one bothered to examine her sources on this.

Problems with Rolleston's Constellations

Of the 48 Ptolemaic constellations, Rolleston ignored three of them, Corona Austrinus, Equuleus, and Triangulum and replaced them with three others. The reason for this is not at all clear. One of the three additions is the bands tying the fish together in Pisces. Rolleston claimed to have found an ancient

source that separated the fish and the bindings into two separate constellations, so apparently she decided that this was a primordial constellation, though she gave no reason for this. The other two additions, the Southern Cross and Coma Berenices, are recognized constellations, but are of more recent origin than Ptolemy.

Advocates of the gospel in the stars claim that the Southern Cross being an ancient constellation that was lost to most temperate northern latitude observers due to precession, but that five centuries ago explorers were delighted to rediscover this ancient sign of the crucifixion. In Ptolemy, the stars that comprise Crux were part of Centaurus, and descriptions of it as anything else are rare. Certainly, any description of it as a cross is modern, despite what supporters of the gospel in the stars claim. The attempted identification of symbols of the cross throughout Christian history in support of some primeval gospel is not unique or even new to Rolleston, as evidenced by William Haslam's 1849 book, *The Cross and the Serpent*.

The Coma Berenices constellation is the hair of Queen Berenice II of Alexandria. Since she died 221 BC, that constellation cannot date any earlier than that. References to this being the hair of Queen Berenice began appearing within a century after her death, and Ptolemy mentioned this faint grouping of stars as hair, but did not ascribe it to her (Coma Berenices does have a hairy appearance, owing to the fact that it lacks any bright stars, but it makes up for that with the many faint stars in a cluster that one can easily pick out on a clear, dark night). Nor did Ptolemy include this group as one of the 48 constellations. Regular inclusion of Coma Berenices as a constellation on star charts began in the sixteenth century, though there were much earlier depictions of this faint grouping of stars on some star charts.

Seiss and Bullinger identified Coma Berenices as a woman holding a small child (an obvious reference to Mary and Jesus), even including identical drawings of this grouping. The source of the drawing appears to be the Dendera planisphere, a stone star chart found in Dendera, Egypt, which is about 2,000 years old (though at the time of Rolleston, Seiss, and Bullinger, it was thought to be far older). Both of them claim that the original name of the constellation was indeed Coma, but that later cultures misunderstood this. For instance, Seiss opined,

The Greeks knew not how to translate it, and hence took *Coma* in the sense of their own language, and called it *hair*—*Berenice's Hair* (Seiss 1882, p. 29).

Bullinger had similar reasoning (Bullinger 1893, p. 35). The intended Hebrew word is *kamah* (Strong 1890, #3642), meaning “the desired, or longed for” as he suggested is found in Psalm 63:1 or Haggai 2:7, though the word used in Haggai 2:7 is *chemdah* (Strong

1890, #2532), not *kamah*. Others who have followed Rolleston, Bullinger, and Seiss repeat these teachings. However, it appears that both Bullinger and Seiss relied upon Rolleston for this, but misunderstood what Rolleston actually said. Rolleston (1865, part 2, p. 16) noted that on the Dendera planisphere there is a figure of a woman holding a small child below the figure of Virgo, and she surmised that this otherwise separate drawing was related to Virgo, though Virgo has no child displayed with her. Rolleston (1865, part 2, p. 17) thought that Coma represented the branch or sheaf of grain that Virgo normally is depicting as holding. One could get that understanding from the Dendra planisphere, for the scale is difficult to interpret, and the fuzzy appearance of the Coma star cluster could be said to resemble a sheaf of grain. Incidentally, Rolleston consistently refers to the sheaf as a branch in an obvious connection to Isaiah 11:1. However, that branch is from a stump of a tree, and Virgo always is depicted with a sheaf of grain, not a tree branch.

Are we to equate the modern constellation of Coma Berenices with the depiction of a woman holding a child on the Dendera planisphere? Hardly. The figure in question on the Dendera planisphere is below both Virgo and Leo, but Coma Berenices is above. Note that the star charts of Seiss (back inside cover) and Bullinger (1893, plate 2, p. 35 and back cover) clearly show this little constellation of a woman holding a child above Virgo that is claimed to be copied from the Dendera planisphere (Bullinger 1893, pp. 35–36). Although this is the correct location of Coma Berenices, it is clearly is on the other side of Virgo where the Dendera planisphere depicts it (Rolleston 1865, part 5, p. 1). Obviously, whatever the Dendera planisphere is depicting, it is not to be identified with the constellation Coma Berenices as Bullinger and Seiss have. As previously mentioned, Rolleston appeared to get the location of this image correct, so why did Bullinger and Seiss confuse this? Elsewhere on the same page, Rolleston (1865, part 2, p. 16) states under the list of the first decan, “COMA, the Branch or Infant near or held by the Woman.” This contradicts what Rolleston wrote later on that page, and does seem to clearly imply the equivalence of Coma Berenices with this supposed constellation of the mother and child. So this apparently is the source of the misunderstanding by Seiss and Bullinger. This also apparently is how Rolleston, Seiss, and Bullinger managed to conjecture a supposedly ancient constellation, “The Desired For,” out of Coma Berenices, although there is absolutely no evidence that such a constellation existed in ancient times. Given the connection to the virgin birth, this particular constellation is very important to many supporters of the gospel in the stars today. It is most unfortunate that they have uncritically accepted Rolleston, Seiss,

and Bullinger on its existence.

Rolleston (1865, part 2, p. 17) quoted Albumazar as saying:

There arises in the First Decan, as the Persians, Chaldeans, and the Egyptians, the two Hermes and Ascalius teach, a young woman, whose Persian name translated into Arabic is Adrenedefa, a pure and immaculate virgin, holding in the hand two ears of corn, sitting on a throne, nourishing an infant, in the act of feeding him, who has a Hebrew name (the boy, I say), by some nations named Ihesu, with the signification Ieza, which in Greek call Christ.

Rolleston went on to comment that “Ieza,” probably was the Hebrew verb *yasha*, meaning “to save.” She also footnoted that “Adrenedefa” was from Hebrew, meaning “a pure virgin, offering,” with Exodus 35:29 as a reference. The intended Hebrew word here is *nedabah* (Strong 1890, #5071), which means “free will offering,” but it is not a good fit. And how this relates to a virgin is unknown, though it possibly may mean that Rolleston thought that Mary made a free will decision to remain a virgin as a form of sacrifice, for Rolleston did believe in the perpetual virginity of Mary (Rolleston 1865, part 2, pp. 98–99). Unfortunately, Rolleston did not give a reference to where in Albumazar she found this quote, so it is not possible to check this quote for accuracy. It is not found in *The Book of Flowers*, the only Albumazar work actually mentioned in Rolleston’s book. This is such a wonderful quote to support the gospel in the stars thesis that most who followed Rolleston have uncritically repeated the quote, even embellishing the quote by explicitly pointing out that Albumazar was Muslim, not Christian. The earliest example of this embellishment that I have found is Seiss (1882, pp. 28–29).

Given the poor track record that Rolleston has in accuracy and documentation, I am very skeptical of this quote. I would like it if someone could find where this quote occurs and provide the reference, if indeed it does exist. Assuming for now that it is an accurate quote, does it make the strong case that gospel in the stars advocates think? Hardly.

First, contrary to common belief among Christians, Muslims do not doubt the virgin birth of Jesus. Muslims view Jesus as among the greatest of the prophets, second only to Mohammed. Mohammed himself taught that Jesus had no earthly father, but that it did not follow that Jesus was Emmanuel. So this quote, if legitimate, is not a grudging admittance by a Muslim as many seem to think.

Second, Albumazar wrote in the ninth century, eight centuries after the ministry of Jesus. Rolleston relied upon a Latin translation made at least six centuries after Albumazar. This leaves a tremendous amount of time for Albumazar to have

been influenced by Christian teachings and for later transmission of his writings to have been influenced by Christian teachings. Rolleston assumed that Albumazar was transmitting ancient, pre-Christian thought, but this has not been demonstrated. Without clear demonstration of the clear antiquity of what Albumazar allegedly wrote on this matter, Rolleston’s does not prove anything.

While upon this subject, I ought to address a common misunderstanding found in the literature (including gospel in the stars literature) concerning Virgo. Many sources quote a line from William Shakespeare’s *Titus Andronicus*, Act 4, Scene 3 to prove that as recently as Shakespeare’s time people generally pictured Virgo with a young child in her lap (and obvious reference to Mary and young Jesus), with the implication that this supposedly ancient depiction has since disappeared. However, many depictions of Virgo that are earlier than or are contemporary to Shakespeare show no such thing. Perhaps we are supposed to believe that this inferred ancient depiction disappeared, and then briefly reappeared four centuries ago, only to disappear once again. The context of the line in the play is that characters are shooting arrows up into the sky, arrows with messages to the gods attached. Titus observes that one of the arrows was shot up to Virgo. Rolleston stated that the arrow was shot up to “the good boy in Virgo’s lap.” (Rolleston 1865, part 2, p. 17)

Here is how Seiss quotes the line, “to the good boy in Virgo’s lap.” (Seiss 1882, p. 29), and Bullinger renders it, “Good boy in Virgo’s lap” (Bullinger 1893, p. 36).

Even Allen agrees that is a reference to the Mary and Jesus as a baby, and he quotes the line as: “Good boy in Virgo’s lap;” (Allen 1963, p. 463).

Notice that these quotes do not exactly agree, but this at least can be attributed to various versions of *Titus Andronicus*, for versions differ in punctuation, spelling, and even words. These quotes, taken in isolation, could be interpreted to refer to a boy sitting in Virgo’s lap, but this is not what the passage means in context. Here is the entire line by Titus: “Oh, well said, Lucius! Good boy, in Virgo’s lap! Give it Pallas.”

Here Titus is praising his grandson, Lucius, for his excellent shooting. Earlier, Titus had affectionately called young Lucius “boy” more than once, and “well said” is better understood today as “well done.” Titus congratulates Lucius for squarely landing an arrow in Virgo’s lap, so the “good boy” here refers to Lucius, not to baby Jesus. Titus goes on to praise his nephew Publius for his arrow shooting off one of the horns of Taurus. Titus’ brother, Marcus, and father to Publius, further elaborates on the jesting by noting that when Publius’ arrow struck Taurus, the bull knocked Aries so that both of Aries’ horns fell to the earth. I have

independently discussed this portion of the play with two of my colleagues at the University of South Carolina, Lancaster, professors who teach English. They concur with this interpretation, that “good boy” is praise for Lucius and does not refer to a baby seated in Virgo’s lap. This may appear as nitpicking to some, but this incorrect interpretation of Shakespeare illustrates how proponents of the gospel in the stars so easily misread texts in support of their thesis.

Problems with Rolleston’s Interpretation of Orion

The name Orion appears three times in the Bible (Job 9:9, 38:31; Amos 5:8). Rolleston correctly noted that *Chesil* is the Hebrew word translated as “Orion” in all three instances (Rolleston 1865, part 2, p.30). Rolleston viewed Orion as a type of Christ. Part of this came from the name “Orion.” The meaning and source of this name is obscure, but, according to Allen (1963, p.304), it comes from Akkadian, and means “Light of Heaven,” an apparent appeal to Matthew 4:16 on Rolleston’s part. She offered that although in most charts Orion’s foot rests upon a hare, in at least one ancient Indian star chart there is snake in place of the hare. Presumably, this snake has bitten, or bruised, Orion’s heel, but he is crushing the serpent’s head in fulfillment of the first Messianic prophecy (Genesis 3:15). She also notes that in some mythologies Orion was stung to death by a scorpion. Some of those stories have Orion stung on the foot, but others do not specify where the scorpion stung Orion. One tradition is that the scorpion in question is Scorpius, and that is the reason why Orion and Scorpius are completely separated in the sky so that both are never visible at the same time. Presumably this is to keep the two separated.

There are several problems with Rolleston’s connection of Orion and Jesus Christ. First is Rolleston’s parallel between Orion dying by means of a scorpion and Christ’s heel being bruised by Satan. For example, the scorpion story is not the only story of Orion’s demise. An alternate ending (Olcott 1911) has Orion swimming away after battle with the scorpion when Apollo tricked Artemis into shooting the dark object in the water (Orion’s head) with an arrow. Only later did Artemis sorrowfully learn that she had killed Orion. Rolleston seemed to select the stories that best fit her hypothesis and ignored others. Furthermore, a scorpion is not a snake. To claim illustration of Genesis 3:15 with a scorpion is a tremendous stretch.

A second problem with Rolleston’s interpretation is interpreting the constellation below Orion as a snake rather than the majority opinion that it is a hare. How did she know which was the true primordial constellation? She did not; she merely chose the one that matched her thesis.

A third problem with Rolleston’s interpretation is

chesil, the Hebrew word used for Orion. Elsewhere this word is translated “fool.” For instance, the eight times that the word *fool* appears in Proverbs 26, this is the word used. Thus, by the Hebrew name for him, we can see that Orion is not an individual worthy of respect and devotion. To equate this fool with a type of Christ at the very least seriously borders on blasphemy, and most Christians ought to find this offensive. If Rolleston had been as proficient in Hebrew as required to do the word studies that she supposedly did, then she ought to have known that the Hebrew word for Orion is the same as a “fool.” Instead, Rolleston (1865, part 2, p.10) claimed that *chesil* means “bound together,” while Bullinger (1893 p.125) claims that *chesil* refers to a great man, but these claims are patently false. Rolleston either was not qualified to do these studies, or she intentionally ignored this blasphemous connection. Bullinger, Seiss, and others ought to have known better than this, but, alas, they did not, or they chose to go with their pet thesis instead. This is an example of gospel in the stars proponents ignoring biblical names for stars, opting instead for pagan sources, because those sources support their thesis. However, this clearly is inconsistent with their assumptions.

Problems with Rolleston’s Interpretation of the Star of Bethlehem

Rolleston (1865, part 2, pp.104–106) included a section on the star of Bethlehem. She stated that in about 125BC a bright star appeared, so bright that it was visible during the day. Rolleston also said that this event induced Hipparchus to produce his star catalog about this time. This version of Hipparchus’ motivation was supplied by Pliny the Elder in his *Natural History*, but in his *Almagest*, Ptolemy said that it was Hipparchus’ discovery of precession of the equinoxes that caused Hipparchus to produce his star catalog. However, there is no reason why both stories could not be true. By Rolleston’s comparison with much later events, such as the “new stars” seen in 1572 and 1604, today we would recognize the 125BC event as a nova or supernova. Indeed, many modern astronomers think that it was a supernova, though not much credence is given to it, because all mentions of it come from much later, secondary sources. Rolleston went on to suggest, in an oblique manner as a series of questions, that this star remained bright for many years (into the second centuryAD), may have been in *Coma* (her alleged constellation of “the Desired”), and hence was the star that alerted the Magi that the Messiah was born. I find it interesting that she did not clearly state these as “facts.”

She also brought in legends about the star which are attributed to Zoroaster. Another legend that she brought up was that the Magi saw the reflection of

this bright star in the bottom of a well in Bethlehem, thus indicating that this star was directly overhead. Of course, if there were such a bright star, it could be directly overhead only a few minutes each night. Rolleston suggests that since this occurred about midnight on the winter solstice, this must have been when the Magi arrived. Notice the endorsement of the traditional date of December 25 for Christ's birth, something that Rolleston endorses elsewhere, but almost no scholars today believe was the correct date. Rolleston did not document her sources for much of this, but did quote from Trench (1850). She particularly quoted Trench about early church fathers, such as Ignatius, about the appearance of this star. Both Seiss (1882, pp. 161—162) and Bullinger (1893, pp. 36—39) included similar passages about this alleged “new star” being the star of Bethlehem. From their descriptions, it is very clear that Seiss and Bullinger solely and uncritically relied upon Rolleston on this matter. In turn, many writers on the gospel in the stars today rely solely and uncritically upon Seiss's account.

How credible is this explanation for the star of Bethlehem? Unfortunately, it is not credible. First, a nova or supernova is not readily visible for years. A nova is bright for a few days, but then quickly fades away. For instance, in 1975 I independently “discovered” Nova 1975 (V1500 Cygni). For one night, it was one of the brightest stars in the sky, but it faded from view within a week. A supernova stays bright longer than a nova, but it too fades. For instance, the 1054 supernova that produced the Crab Nebula was visible during the day for a few weeks, but it completely faded from naked-eye view after 14 months. Therefore, I seriously doubt that an alleged nova or supernova could have been visible for as long as Rolleston claimed (more than a century).

Second, it is not clear how, if the star had been visible for more than a century before the birth of Christ, this would have been an appropriate sign to the Magi. Unless the Magi were well over 100 years old, the star would have always been visible to them, so why would that be unusual? Also, what would have prompted them to finally make the journey to Israel when they did? Many modern supporters of the gospel in the stars think that the star was a conjunction of planets as well, but then this multiplies the number of stars that were seen.

Third, I have not found any astronomical record of this star. Modern historians of astronomy have poured through historical records to identify possible nova and supernova sightings from the past, but this event does not show up on any of those lists. I do not know what to make of the alleged support from early Christian writers—no one writing about this has provided references. Given the very poor manner that Rolleston and those who followed her handled other information,

it is very likely that this is another example of how they let their thesis create all sorts of new “facts” in support of the thesis. It is a shame that modern supporters of this have not bothered to carefully check these extraordinary claims, opting instead to uncritically repeat them as established facts.

Questions about Meanings of Names of Stars

In a previous paper (Faulkner 1998) I gave only a few examples of the poor derivation of meanings of star names that supporters of the gospel in the stars theory have put forth. Those examples were Zuben el Chamali, Zuben el Genubi, Deneb, Svalocin, and Rotanev. The last two were particularly embarrassing, for we can trace when those names began to appear on star charts, in the early nineteenth century, during the lifetime of Rolleston, though she attempted to find meanings for those stars in ancient languages. In a response to my earlier paper, Wieland (1998) suggested that it was not prudent to dismiss the gospel in the stars entirely until more star name derivations by Rolleston and others could be checked. I never meant to imply that the five examples that I gave in the first paper were all the problems with name meanings, but rather I intended them as representing the poor scholarship involved. In this section, I take Wieland's challenge as I further discuss the very questionable derivations of star names and other related terms that Rolleston and her followers have made to demonstrate how poorly founded this entire idea is. This job is much easier with Rolleston's book now available, for in most cases she identified the Hebrew word, along with an Old Testament reference, to indicate which Hebrew word she had in mind as the original meaning of each star's name. Neither Bullinger nor Seiss generally did this, as they uncritically repeated Rolleston's conclusions without any notes for others to decipher their work. Hence, in what follows I will reference Rolleston's book.

Rolleston claimed that the Greek word *zodiakos*, from which we get the word *zodiac*, means “a way having steps” (Rolleston 1865, part 2, p. 5), though her derivation is difficult to follow. All other sources (apart from other gospel in the stars advocates), including any good dictionary, reveal that the word means “circle of small animals” (or animal figures). One of the two Greek roots in the word *zodiac* gives us the English words *zoo* and *zoology*. All too often Rolleston rejected the conventional derivation of words, opting instead for her attempts to sound out homophones in Hebrew or other ancient languages that fit her thesis. Many other examples abound. For the few examples that I will briefly discuss here, I will rely mainly upon Allen's book, a reasonably reliable source for such matters according to historians of astronomy. Virtually all other sources concur with

Allen.

In the first paper and earlier in this paper I discussed how supporters of the gospel in the stars erroneously claim that the bright star Deneb (Alpha Cyngi) comes from the Arabic word for tail. Rolleston's intended Hebrew word for the origin is *diyn* (Strong 1890, #1777), though she did not explain the appended syllable to get "deneb" from this. "Deneb" means tail even in modern Arabic, but the name correctly derives from *dhanab al-dajaja*, which means "the hen's tail." There are two other star names with this Arabic word. One is Denebola, (Beta Leonis). Rolleston gave the meaning as "the judge or Lord who cometh quickly." She saw "judge" coming from the previously mentioned Hebrew word *diyn*, and she saw "cometh quickly" from the Hebrew word *bahal* (Strong 1890, #926). The word *diyn* appears 24 times in the Old Testament, and each time it is used as a verb, to judge or a related action. However, Rolleston uses this as a noun. A better Hebrew word for a judge, as a noun, is *shaphat* (Strong 1890, #8199). This is the word used for the Old Testament judges such as Samson. Rolleston and her followers have incorrectly used a verb as a noun here. An alternate name for Denebola is Al Defera, a name that originated from the *Alphonsine Tables*. Rolleston says that this name means "the enemy put down/thrust down." The intended Hebrew word is *nadaph*, (Strong 1890, #5086). Allen says that this name comes from an Arabic word for the tuft at the end of the tail of a lion. The third star with "deneb" as part of its name is Deneb Algiedi (Delta Capricorni). This name is a transliteration from the *Almagest* and means "tail of the goat," Capricornus being a goat. *Deneb* is Arabic for "tail," *al* is an Arabic article; *giedi* is the Arabic word for "goat." There is even a related Hebrew word, *gedi* (Strong 1890, #1423). The word appears 16 times in the Old Testament and is translated "kid" each time. The word means "kid," but it may refer to any young male goat. However, Rolleston and her followers quickly passed over this obvious word for goat in search of some other meanings.

Rolleston also saw the Hebrew word for judge in the name of an entire constellation—Eridanus, or the river. She said that the name meant "river of the judge or ruler" (Rolleston 1865, part 2, p. 11). Rolleston saw three Hebrew roots here. The first two syllables were to come from *yeor* (Strong, 1890 #2975), meaning "stream." The third syllable again comes from the Hebrew verb, to judge. Rolleston's intended Hebrew word for the final syllable is *karas* (Strong 1890, #7164), meaning to "stoop." It is not all clear what role this latter word played, other than supplying the final syllable, but the first syllable of that word is missing.

The name Eridanus is not what the Greeks called this constellation, for they simply called it "the river," of course using *potamos*, the Greek word for "river."⁸ In Greek mythology, *Eridanos* was the name of an unspecified river somewhere in central Europe. Many eventually began to associate *Eridanos* with the Po River (which flows eastward across northern Italy). "Eridanus" is the Latinized version of *Eridanos*. It appears that this Latin name for the river came into use during the Medieval Period, as did most other Latin names for constellations, as previously discussed. Overall, Rolleston's meaning for Eridanus is untenable, and even if her derivation were true, it is not all clear how this would relate to the gospel message.

Rolleston lists the Hebrew meaning for Mira, the famous variable star in the constellation Cetus, as "the rebel" (Rolleston 1865, part 2, p. 9). The intended Hebrew word is *marah* (Strong 1890, #4784). The problem is, Mira was not listed by any ancient sources, and as such this name is of relatively recent origin. Credit for the discovery of the variable nature of Mira goes to David Fabricius in 1596. In 1662 Johannes Hevelius named the star "Mira" in his *Historiola Mirae Stellae*. The name means "wonderful," or "astonishing, and comes from the Latin word *mirus* (we get the word *miracle* from this word). How could Rolleston have found an ancient Hebrew meaning in a star name that originated only two centuries before publication of her book? This is similar to her gaffe concerning Svalican and Rotanev (Rolleston 1865, part 2, p. 21) that I previously discussed.

Rolleston stated that the first magnitude star Aldebaran, the brightest star in Taurus, means "the leader" (Rolleston 1865, part 2, p. 10). Here Rolleston's intended Hebrew word is *haddabar* (Strong 1890, #1907). According to Allen (1963, p. 383), the name comes from Arabic for "the follower," presumably because it follows behind the Pleiades as the earth rotates. Therefore, Rolleston found exactly the opposite meaning for this star. On the same page, Rolleston claims that Betelgeuse, the brightest star in Orion, means "coming." Nearly everyone else agrees with Allen (1963, p. 310) that the name means "armpit of the central one." This is appropriate, because Betelgeuse does mark the armpit, or shoulder, of Orion.

Rolleston says that Capella, the first magnitude star in Auriga, comes from Latin and means "the goat, atonement" (Rolleston 1865, part 2, p. 11). She is partly correct, for Allen (1963, p. 86) notes that the name comes from the diminutive of the feminine word for goat, so this literally is "the little she-goat." There are at least two problems here. First, Rolleston made an obvious connection to a sacrificial goat, but

⁸ The word *hippopotamus* comes from this Greek word along with *hippo*, the Greek word for *horse*.

the atonement sacrificial goat was to be a male, not female (Leviticus 1). Second, she admits to getting this meaning from Latin, but her assumption (number 4 above) is that Hebrew was the mother tongue of all. However, this name is not even close to the Hebrew or Arabic words for goat. Therefore, this meaning is not relevant if one follows Rolleston's stated methodology. Incidentally, Bullinger (1893, p.134) acknowledges the Latin origin of Capella, but he implies that Alioth was the original name for this star, though there is absolutely no evidence for this. Apparently, Bullinger was so convinced that the Latin name was a translation of the original star name, he simply asserted that this was the case.

Rolleston states that the Hebrew meaning of the star Regulus is "the treading under foot" (Rolleston 1865, part 2, p.15). Actually, the name is the Latin diminutive form of "king." The word *regal* comes from a similar root. Regulus is the brightest star in the constellation Leo, or the lion. We usually think of a lion as being a royal beast, so the name fits. Rolleston had the Hebrew word for foot, *regel*, in mind here. A similar Arabic word does lend its name to another star, Rigel, the second brightest star in the constellation Orion. Rolleston finds the meaning "the foot, or who treadeth under foot" for this star (Rolleston 1865, part 2, p.10), which obviously is an appeal to Genesis 3:15. Allen (1963, p.312) nearly agrees with the first meaning that Rolleston has, for he says that it comes from the first word of *Rijl Jauzah al Yusra*, meaning "the left leg of Jauzah," "Jauzah" being an early Arabic name for Orion. Allen also noted that this name as now known first showed up in the *Alphonsine Tables* in 1521. Therefore, there is some question about Rolleston's derivation, and her second meaning reads far too much into the word.

The proper name for the star Eta Geminorum is Propus. According to Allen (1963, p.235), this name is the transliteration of the Greek word for "foot," for this star is the left foot of Castor, one of the Gemini twins, in the description of Ptolemy. According to Kunitzsch and Smart (2006), this name began appearing as the transliteration from Ptolemy during the Renaissance. Rolleston (1865, part 2, p.12) gives the meaning from Hebrew as "the branch, spreading." The intended Hebrew words are *porah*, meaning "bough" (Strong 1890, #6288), and *push* meaning "spread" (Strong 1890, #6335). However, this meaning is doubtful, given the strong case given by Kunitzsch and Smart.

There are several problems dealing with Ursa Major. Rolleston (1865, part 2, p.13) says that the Hebrew name for the constellation is "Ash," meaning "the assembled." Allen (1963, pp.422-423) says that the Hebrews knew the constellation as Dobh, which is the word for bear in Hebrew (for example 1 Samuel 17:34, 36-37). As previously mentioned, this Hebrew

word for Ursa Major comes from medieval sources and likely is of medieval origin. In Job 9:9, 38:32 *ayish* is used, but Jerome translated this Arcturus, which the King James Version followed (I will discuss this in the next section). Allen says that *ayish* refers to the square in the dipper and is a bier, or funeral platform, which has nothing to do with a bear. Admittedly, the one time the word *bier* appears in the King James Version Old Testament (2 Samuel 3:31), a different Hebrew word (*mitta*) is used. *Ayish* does come from a root meaning "to assemble oneself." Apparently, Rolleston endorsed the majority opinion that the verses in Job indeed refer to the Big Bear, from which she got her Hebrew name for the constellation. However, (much later) Hebrew sources from which she got the names of other constellation refer to the Big Bear as "Dobh." However, Allen states (1963, p.419) that this constellation has almost universally been known as a bear, even among North American Indians (Allen 1963, p.423). This coincidence argues for a very ancient origin for the Big Bear. However, Rolleston claims that to the ancients this constellation was a sheepfold, though she did not explain how she got her information. Bullinger (1893 p.155) elaborated a bit on this, for he said, "The Arabs still call it *Al Naish*, or *Annaish*, the assembled together, as sheep in a fold." However, Allen (1963 pp.432-433) says that this refers to a bier, as suggested by the similar Hebrew word *ayish*.

Part of the reasoning for making a sheepfold out of the bear must come from the name of the star Alpha Ursae Majoris, or Dubhe. Rolleston claims that this means "a herd of animals," and Bullinger concludes that the likely intended animals are sheep. Rolleston and followers argue that the name derives from the Hebrew word *dober* (Strong 1890, #1699) which is translated "fold" in Micah 2:12. However, the Hebrew word for "bear," *dobe* (Strong 1890, #1677) is a much better fit, and the Arabic word for bear is very similar. This is the word used for "bear" in 1 Samuel 17. There is another problem with Rolleston's claim, for *dobeh* has two Hebrew consonants (called dalet and beth), which are the same consonants in Dubhe, whereas *dober* has these consonants plus the Hebrew consonant called resh.

The star Beta Ursae Majoris is called Merak. Rolleston says that this is from the Hebrew word *mir'iyth* (Strong 1890, #4830) meaning "the flock" or the word derives from an Arabic word that means "purchased." Well, which is it? Well, neither actually. Notice that the former requires a consonant change at the end of the word ("k" to "th"). But Allen says that the name comes from an Arabic word that means the "loin (of the bear)," not "purchased."

Gamma Ursae Majoris is called Phecda, which, according the Allen, comes from the Arabic for "thigh,"

for this star marks the thigh of the Great Bear. Rolleston says that the name comes from a Hebrew root that means “visited, guarded, numbered.” The Hebrew word that she had in mind is *paqad* (Strong 1890, #6485).

Delta Ursae Majoris is Megrez, which Allen says comes from the Arabic for “root of the tail,” for it is located at the base of the tail of the Great Bear. Rolleston says the name means “separated, as the flock in the fold, cut off.” Her intended Hebrew word here is *garaz* (Strong 1890, #1629).

Rolleston gives the meaning of Epsilon Ursae Majoris, Alioth, as “the she-goat, or ewe.” The intended Hebrew word is *uwl* (Strong 1890, #5763). Rolleston misidentified Zeta Ursae Majoris as Epsilon Ursae Majoris (obviously a misprint), though Bullinger corrected this error in his book. Both say that this star’s name, Mizar, means “separate,” with the intended Hebrew word being *nazar* (Strong 1890, #5144). Allen (1963, p.440) says that Joseph Justus Scaliger (1540–1609) improperly changed the name from Mirak to Mizar, Arabic for girdle or waistcoat. Close to Mizar appears fainter Alcor. Rolleston wrote that the name is Arabic for “the lamb.” The intended Hebrew word of origin is *kar* (Strong 1890, #3733). Allen (1963, p.445) says that the name comes from the Arabic for “the faint one.” This works very well, for Alcor is much fainter than the nearby Mizar. One can easily see that there are problems with the consonants in attempting to connect these Hebrew words to the names that we have for these stars.

Rolleston claims that the name of the bright star in Scorpius, Antares, comes from Arabic and means “the wounding” (Rolleston 1865, part 2, p.19). Rolleston’s derivation is unclear here. She gives the meaning as “the wounding (Arabic form) (cutting),” and she gives Jeremiah 36:23 as the reference. Apparently, the Hebrew word intended is *qarah* (Strong 1890, #7167), but how this morphed into Antares is a mystery.

The name is a transliteration of the Greek word used by Ptolemy, meaning “like or in the place of Mars” (anti-Ares, Ares being the Greek equivalent of the Roman God of war). Antares has this name because in brightness and color it often resembles Mars.

Rolleston states that the meaning of the Greek word *arctos* is “traveling,” the intended Hebrew word being *orechah* (Strong 1890, #736) (Rolleston 1865, part 2, p.14); any good dictionary reveals that the meaning is from the Greek word for “bear.” This is relevant to the meaning of the bright star Arcturus.

Rolleston states that the name of Enif, a star in the constellation Pegasus, means “branch or bough” in Hebrew, giving Leviticus 23:40 as a usage (Rolleston 1865, part 2, p.22). There are two Hebrew words translated as “bough” in Leviticus 23:40,

peree (Strong 1890, #6529) and *anaph* (Strong 1890, #6057) though this is the only instance where *peree* is translated as “bough,” for elsewhere is translated as “fruit” or related words. Obviously, Rolleston meant the second word. The Hebrew word *kaph* (Strong 1890, #3709) is translated “branches” in Leviticus 23:40. She later claims that the constellation name Cepheus comes from Hebrew for branch (Rolleston 1865, part 2, p.23), citing once again Leviticus 23:40. The Hebrew word *kaph* appears 192 times in the Old Testament, but Leviticus 23:40 is the only verse where it is translated as “branch(es).” The name Cepheus bears no resemblance to the Hebrew words here, so Rolleston’s derivation is unclear at best.

There are many other examples that I could list. Suffice it to say that the overwhelming majority of the meanings that Rolleston gives for words and names of stars are at complete variance with other, more reliable sources. She was correct in a few instances, but most of her correct meanings had little, if anything, to do with her thesis about the gospel message being preserved in star names. The sheer volume of the incorrect meanings ought to be an embarrassment for those who subscribe to the gospel in the stars theory and certainly argues strongly against the correctness of their thesis.

One example of a correct meaning given by Rolleston is Fomalhaut, the brightest star in Piscis Australis, or the southern fish. Fomalhaut comes from Arabic, meaning “the fish’s mouth” (Rolleston 1865, part 2, p.22). Rolleston did not embellish upon what possible soteriological meaning Fomalhaut or Piscis Australis might have, so it is not clear what possible gospel-related meaning she saw in either of them. Seiss (1882, pp.75–76) did not even mention Fomalhaut, but he did speculate on some possible meanings for the constellation. He began his speculation with these words:

The mythic legends do not help us much with regard to the interpretation of this constellation, but they still furnish a few significant hints.

After mentioning some pagan legends about Piscis Australis, Seiss inferred connections to the church as the bride of Christ. Bullinger, following Rolleston, did give the correct meaning for Fomalhaut, but in his more terse style, he abruptly and incredibly concluded about the constellation (Bullinger 1893, p.89):

It sets forth the simple truth that the blessings procured by the MAN—the coming Seed of the woman, will be surely bestowed and received by those for whom they are intended. There will be no failure in their communication, or in their reception. What has been purchased shall be secured and possessed.

Though obliquely related—Bullinger concentrated on Christ while Seiss emphasized the church—these meanings are very different. This difference

illustrates just how the gospel in the stars thesis amounts to a sort of Rorschach test—one sees what one wants to see in the constellations. To her credit, Rolleston apparently could see no connection to the gospel in *Piscis Australis*, so she quietly let this group of stars go by. But Seiss and Bullinger, wrapped up in enthusiasm for the gospel in the stars thesis, blundered on with odd speculations.

Why not use Hebrew Names where they are Known?

Rolleston found Hebrew root meanings for various common and traditional names associated with stars, and her successors uncritically followed her approach. However, a few names involving stars are found in the Bible. How do supporters of the gospel in the stars handle these? Unfortunately, they do not handle them very well. In most of the cases, there is some uncertainty in how to accurately identify which names go with which astronomical objects.

We have already seen that Orion is mentioned three times in the Bible (Job 9:9, 38:31, and Amos 5:8). We also have seen that the Hebrew word used in reference to Orion is *chesil*, a Hebrew word meaning “fool.” However, Rolleston says that the word means “bound together” (Rolleston 1865, part 2, p.10), and Bullinger says that it means “a strong one, a hero, or giant.” But as we have previously seen, *chesil* does not mean either of these. How a scholar such as Bullinger could have missed this is amazing.

Supporters of the gospel in the stars get much of their meaning from the common name of this constellation, Orion, which they generally render as “coming forth as light” (Rolleston 1865, part 2, p.10, and Seiss and Bullinger concur. Allen (1963, p.304) states that the origin of “Orion” is in doubt, but the best guess is that it comes from Akkadian for “light of heaven,” referring to the sun. This is close to what Rolleston claimed, so this must be the source of that claim. Now, if the premise is that the names in the original language carried the true meanings of the names of the stars and constellations, and if that mother tongue was Hebrew, it would stand to reason that one ought to look for meanings in the Hebrew word for Orion. But if one objectively looks at the Hebrew word for Orion, one finds that the meaning clearly contradicts the meaning that advocates of the gospel in the stars have gleaned.

One could argue that *chesil* was not the original name for Orion, but there is no evidence for that. Certainly, in light of the fact that Orion is mentioned twice in Job, arguably the oldest book of the Bible, we have here the earliest name for Orion on record, seeing that the other ancient mention of Orion (Aratus) postdates Job by at least a millennium. One could alternately argue that perhaps these biblical

references do not refer to Orion at all. Indeed, the word *chesil* in reference to a heavenly object is found a fourth time, in Isaiah 13:10, where for some reason the word is translated “constellations” in the King James Version. The Revised Standard Version, New American Standard, and New International Version concur on the King James Version translation of *chesil* in all four verses. Interestingly, the Septuagint concurs with Job 38:31, but uses “Orion” rather than “constellations” in Isaiah 13:10, and gives “Hesperus,” referring to the Evening Star (Venus) instead of “Orion” in Job 9:9. The Septuagint renders *chesil* as “all things” in Amos 5:8.

Therefore, in the case of Orion, it seems that the supporters of the gospel in the stars do not follow their own theory for the origin of the names of the constellations. How do other examples fare? The Pleiades star cluster appears three times in the Bible, in the same three verses where Orion appears in the King James Version. In the two verses in Job it appears as “the Pleiades,” but in Amos it appears as “the seven stars.” The Revised Standard Version, New American Standard, and New International Version have “Pleiades” in all three verses. The Septuagint agrees with the use in the two verses from Job, but apparently lumps the Pleiades and Orion into “all things” in Amos 5:8. The Hebrew word translated “Pleiades” in all three instances is *kiymah*, meaning “heap” or “accumulation.” This name is appropriate, for the Pleiades appear to the naked eye as a little lump of stars. Is there any great soteriological meaning in this? It would not appear so, given its apt description of the Pleiades. However, advocates of the gospel in the stars generally ignore the biblical (Hebrew) name for the Pleiades, opting instead for the possibly later origin pagan name. They claim that the name “Pleiades” means “the congregation of the judge or ruler.” Bullinger (1893, p.121) goes on to say this “comes to us through the Greek Septuagint as the translation of the Hebrew *kimah*,” which is entirely without merit.

Another astronomical term appears in Job 9:9 and 38:32, one verse after the other verse from Job that we have been discussing. The Hebrew word *ayish* (Strong 1890, #5906) is translated “Arcturus” in both verses in the King James Version. The Revised Standard Version, New American Standard, and New International Version all translate the word as “bear” in these two verses. The Septuagint maintains “Arcturus” in Job 9:9, but goes with “Evening Star,” presumably Venus, in Job 38:32. Arcturus is the name of a bright star in the constellation Bootes, a wagon driver. The name Bootes is one of the few Greek constellation names; it is a transliteration of the Greek word for wagon driver. “Arcturus” comes from *arktos* and *ouros*, the Greek words for bear and

guard, so the name means “guardian of the bears.” The bears in question here are Ursa Major and Ursa Minor, the great and small bears. It is not entirely clear exactly what *ayish* refers to. Schiaparelli (1905, pp.54–60) gives an excellent discussion of the possibilities, including the two mentioned here, along with the bright star Capella, the bright star Aldebaran, and the Hyades star cluster, a cluster close to Aldebaran and the Pleiades. Like nearly everyone else, Schiaparelli appeared to like the majority opinion that the “great bear” is intended here. *Ayish* comes from the Hebrew verb *uwsh*, meaning “to hasten” or “to assemble oneself.” Again, whatever *ayish* refers to, it is not clear that there is any soteriological meaning here.

Another astronomical term that appears in Job 38:32 is “mazzaroth,” which is a transliteration of the Hebrew *mazzarah* (Strong 1890, #4216). This word appears just once in the Bible, and the Septuagint, King James Version, and the Revised Standard Version all stuck with “mazzaroth,” but the New American Standard and New International Version go with “constellations.” The word may refer to all the constellations, or it may refer to just the zodiacal constellations. A related word is *mazzalah* (Strong 1890, #4208), which appears just once as well in 2 Kings 23:5. The King James Version translates the word, “planets,” but the Revised Standard Version, New American Standard, and New International Version all render it “constellations.” The Septuagint renders it “mazzaroth” exactly the same word as in Job 38:32. As with *mazzarah*, we do not know for sure if *mazzalah* refers to all the constellations or just the zodiacal constellations. The supporters of the gospel in the stars agree that these words likely mean the constellations, though they seem to prefer restricting the meaning to the zodiacal ones. However, there is no underlying meaning that they attempt to glean from these words.

There are several biblical Hebrew words that have direct connotation to astronomical objects, *chesil*, *kihmah*, *ayish*, and *mazzarah/mazzalah*. With the assumptions that supporters of the gospel in the stars must make, it would seem that these Hebrew words would be closest to the original intended meanings with their soteriological purposes, and thus ought to be central to the gospel in the stars theory. But the supporters of the gospel in the stars theory fail to make any sort of case here. Instead, they normally use other, non-Hebrew names to make their case. This seriously undermines confidence in the theory.

Some Responses to this Criticism

When confronted with criticism of their theory,

supporters of the gospel in the stars generally have several possible responses. One approach is to appeal to the Matthew 2 account of the Magi. We do not know much about the Magi, but they likely did have considerable knowledge of astronomy. In most ancient Middle Eastern cultures, astronomy and astrology were intimately entwined, so it is not possible to ascertain how much the Magi were involved with astrology. Supporters of the gospel in the stars ask how else the Magi could have known about the birth of the Messiah unless there was a gospel in the stars that the Magi, being astronomers, must have known. This is a classic example of the logical fallacy of begging the question. If, as most scholars think, the Magi were Persian, they likely had read Daniel’s prophecy of 70 weeks and hence knew that the time of the Messiah’s arrival was nigh. In fact, the Magi were not the only people who were expecting the Messiah at that time, for many Hebrews were looking for the Messiah as well. We do not know what the star that the Magi saw was, but supporters of the gospel in the stars want us to assume that it must have had something to do with the gospel in the stars. This is all a bit muddled though, because many supporters of the gospel in the stars believe in some astronomical event, such as an unusual planetary conjunction was the star. If that sort of thing was the star, then did the Magi really require the gospel in the stars? There are, however, good reasons to believe that the star of Bethlehem was a unique supernatural phenomenon that God produced to lead the Magi.⁹

Another possible response is to appeal to all the alleged parallels to gospel-related concepts found in constellations, but especially among those in the zodiac. Exhibit A is Virgo, which many take as an obvious analog to Mary. But is it? The prophecy of the virgin birth is from Isaiah 7:14, written a little more than seven centuries before fulfillment. Isaiah was written long after the gospel in the stars supposedly originated, but there is no biblical evidence that there was any other prophecy or expectation of a virgin-born Messiah prior to Isaiah. Furthermore, virginity was something that was prized and much discussed in ancient cultures, for Greek and Roman poets wrote so about virginity. Given the high importance of virginity, it is not surprising that a virgin might show up among the constellations. A virgin with a child in the ancient constellations would have been quite unusual, and so perhaps might have been a good argument for the gospel in the stars. Rolleston understood this, and so she was very creative in claiming that just such a thing did exist. But, alas, she did this with quite a bit of sleight-of-hand, by moving an unclear figure from the Dendera planisphere

⁹ For example, see Faulkner 2010 and Lisle 2006.

to a new location and suggesting a false history to accompany it.

Or consider the presence of a ram and a bull among the zodiacal. Supporters of the gospel in the stars suggest that, being sacrificial animals, these constellations must be related to the gospel story. But are they? To most of us today, these animals are a bit exotic, but they were not the least bit exotic to many ancient cultures in the Middle East. Most people then saw these creatures nearly every day. There is nothing within these constellations to suggest that they were being sacrificed, but even if they were, what would that prove? Those animals were common pagan sacrifices. One could argue (as I would) that these pagan sacrifices were perversions of God's plan, but that does not prove that the constellations are perversions of God's plan.

Other supposed parallels to the gospel story include a constellation representing a man with his foot poised over a serpent, a supposed allusion to the truth in Genesis 3:15. Being the first messianic prophecy dating from the earliest time, this approach could have merit. However, Ophiuchus has his foot over a scorpion, not a serpent. Only by the most creative touch could the scorpion be transformed into a serpent. Furthermore, there is no connection made between Ophiuchus and Scorpius in mythology. There is, however, a connection between Orion and Scorpius, although they are on opposite sides of the sky from one another. Orion has his foot above a hare. It sounds like some sort of weird magic trick to turn a rabbit into a snake, but Rolleston found a way to do that too. With the kind of loose rules of interpretation required to get that, the constellations can be turned into about anything imaginable, which, of course, proves nothing.

Mentioning Orion, when gospel in the stars advocates learn of the criticism that the biblical name of Orion means fool, they often have a most interesting response. They argue that the name of Orion was perverted along with all the other constellation names and lore, and so the verses in Job and Amos use a perverted name for Orion. However, there are at least two problems with this response. First, Job likely is the oldest book of the Bible—it might date to as early as 2000 BC. This predates the first advent of Christ by two millennia. Yet, this response requires that the Magi somehow managed to preserve the gospel truth in the stars, although God's inspired Word gives no hint of it. Second, *chesil* as the Hebrew name for Orion is unique to the Old Testament. Gospel in the stars advocates look for Hebrew and other Semitic language meanings in the pagan name "Orion," but they totally ignore a genuine Hebrew name, because it contradicts their thesis. If God has a name for

Orion, it stands to reason that He would use it in his inspired Word.

The Approach of Maunder and Others

It is instructive to consult E. Walter Maunder, a respected astronomer and Christian who wrote about the constellations and popular astronomy early in the twentieth century. His 1904 book, *Astronomy without a Telescope*, did not address Christian themes but discussed the constellations in the usual context encountered in such books. His second book, *The Astronomy of the Bible*, appeared in 1908, and was obviously directed toward a Christian audience. It is interesting to note that this second book was published just 25 years after Seiss's and 15 years after Bullinger's book. Maunder made no reference or allusion to Rolleston, Seiss, or Bullinger, though Allen, writing a decade earlier, did mention Rolleston's work in non-flattering terms. Since Bullinger's book had a wide following at the time that Maunder wrote his aforementioned book, it is very likely that Maunder knew of Bullinger's book, yet he mentioned nothing of it. It is likely that Maunder considered the gospel in the stars to be so poorly founded as to be unworthy of mention. Admittedly, this is an argument from silence.

In his book, *Myths and Marvels of Astronomy*, Richard A. Proctor (1877) offered an interesting perspective on some constellations. For observers today at about 35°N latitude, some portions of the classic 48 Ptolemaic constellations are not totally visible, for they never rise above the southern horizon. At the same time, there are regions of the celestial sphere that do rise above the horizon yet are blank, lacking any of the Ptolemaic constellations. The 25,900 year precessional cycle of the earth's rotation axis can explain this, and it gives a clue as to where and when the originators of the classic 48 constellations lived. The best fit to this is between 30–38°N latitude during in the twenty-second century BC. Proctor noted that this was just a century or so after the Ussher date for the Flood.

Proctor went on to point out that at the location and epoch of the likely originators of the original 48 constellations, several possibly related constellations would slowly pass above the southern horizon in a certain order as the earth rotated each day/night. The first of these is a water bearer. For some time this has been depicted as a person (Aquarius) pouring out water, but early versions simply have water pouring out of a pot. Aquarius was followed by fish (Pisces), and the water appears to be pouring out upon the fish, as if fish needed more water. The fish were followed by a large ship (the now defunct *Argo Navis*), though Proctor pointed out that the front half of the ship is missing. Lying above the ship and trailing on is the sea snake (Hydra), which is the longest constellation

(at more than 100°). With its narrow width, and given its location on the celestial sphere in the twenty-second century BC, Hydra may have been an excellent navigational aid. Lying on the back of Hydra is a raven (Corvus). The ship was followed by the centaur (Centaurus), a half horse, half man. Now, the horse half is closest to the ship, and Proctor suggested that perhaps originally the horse half actually was the bow of the ship. If so, this would transform the centaur into a man. The centaur is depicted as hoisting a slain animal (usually a wolf) on a lance onto an altar (Ara). For a long time, most people thought of the Milky Way above Ara as smoke rising off the altar.

Proctor made the following possible connection. The water bearer pours water upon fish to represent the beginning of the Flood. The ship, of course, represented the Ark. Proctor opined that Hydra might have resembled the line between water and sky visible above the Ark, and that the raven might have represented the raven that Noah sent out from the Ark (Genesis 8:7). (This thinking is not without precedent, for according to Allen [1963, pp. 166–167] the constellation of the dove [Columba] invented four centuries ago has been suggested as representing the dove that Noah also sent from the Ark [Genesis 8: 8–12]). With the bow of the ship restored, the centaur is now a man (Noah) offering burnt offerings on the altar (Genesis 8:20).

Conclusion

Most of Rolleston's work is fraught with problems. Her entire case amounts to speculation based upon several questionable assumptions. Her methodology of looking for homophones in Hebrew and other ancient Semitic languages is questionable. There are problems with anachronisms, names of recent origin that Rolleston found meaning for in ancient Semitic languages. There are problems with many other words and names whose meanings and derivations are very easy to trace but which Rolleston rejected in favor of her thesis. Rolleston, Seiss, and Bullinger found it very easy to find alternate meanings in all sorts of names even though their intended meanings already existed. That is, the thesis drove the facts rather than the facts driving the thesis. This thesis led to fabrication of false history, such as conjecture of a supposedly ancient constellation, "the Desired," that never existed. Her arrangement of the constellations into decans appears to have originated with her. If this is the case, then much of her thesis is eroded. Critical analysis of the gospel in the stars theory reveals that it relies upon embarrassingly poor scholarship.

The early church had major battles with Gnosticism, and some of the New Testament epistles battled Gnostic teachings that had crept into the church in the first century. One element of

Gnosticism is an emphasis on secret knowledge. That is, knowledge not generally known to the uninitiated that leads either to salvation or to some higher plane of spiritual existence. The appeal of secret knowledge is very strong, and that allure is in evidence today. Examples include the Bible code, the da Vinci code, pyramidology, ancient astronauts, and various grand conspiracy theories.

I include the gospel in the stars in this category of secret knowledge. People become aware of the gospel in the stars by reading a book or an article, hearing a sermon, or watching a video or a presentation on the topic. This information is entirely new to them, the information is not obvious, and the entire package is wrapped in references to various Bible passages. Upon learning this new information, many people feel uplifted and encouraged, though it is not clear what the reason for this good feeling is. Somehow, just acquiring this knowledge makes many Christians feel some new validation of their faith. While well intended, this new knowledge is based upon false information, and is contrary to biblical principles.

The gospel in the stars thesis is not biblical on at least two counts. First, nowhere does Scripture clearly teach that such a message is embedded in the arrangement of the stars. One must build the case for the gospel in the stars with conjecture piled upon conjecture, so at best one can call this a plausibility argument. With no clear teaching in Scripture (or for that matter, prior to 1865), this sort of thing must fall under the categories of fables and endless genealogies (1 Timothy 1:4). Second, the New Testament refers to the gospel as a mystery, something that had not been previously known, but is now revealed (Romans 16:25–26; 1 Corinthians 2:1–8; 1 Peter 1:10–12). Purveyors of the gospel in the stars would have us believe that many people from ancient times knew the entire gospel story long before the New Testament, but this clearly contradicts the New Testament teaching that the gospel was a mystery—revealed at the time of Christ and His apostles.

Not only does this new knowledge not square with Scripture, it is not self-consistent. It is not consistent in that the thesis contends that the alleged gospel in the stars was needed before there was the written Word of God, but when that more clear revelation became available, the gospel in the stars was no longer necessary. If that were the case, what possible purpose could that knowledge serve today? Why would we want to return to an inferior, superseded, and admittedly garbled message today when we have the superior message so readily and effectively available?

I understand the appeal that the gospel in the stars thesis has for so many Christians. I also understand that many Christians find encouragement in it as well. However, I ask that they carefully and prayerfully

consider what I have presented here and in my earlier paper, and that they apply the Berean test (Acts 17:11) to my words and the writings of the proponents of the gospel in the stars.

Is there anything that we can salvage from all of this? Despite the damage wrought by purveyors of the gospel in the stars, the surprising answer is yes, we can salvage something from this. Consider the approach of Stewart Custer (1977). In the text of his planetarium shows, Custer followed the conventional meanings of star names. However, he frequently made parallels to spiritual truths. For instance, a discussion of Virgo can easily lead to discussion of the conception and birth of Jesus Christ. This is not that different from the parables that Jesus told—he used everyday examples that his listeners could relate to. It also is similar to what Paul did in his sermon at Mars Hill (Acts 17:23), where Paul took the inscription at a pagan shrine and launched from it a gospel message. There Paul quoted from Aratus, the previously mentioned poet who wrote about some of the constellations.

While researching this, I came to understand that there may be a kernel of truth to at least one connection made by advocates of the gospel in the stars. The constellation Hercules is among the 48 original constellations of Ptolemy. Hercules is the Greek name for the constellation, but this constellation has gone by many names and had many depictions. All depictions show a man kneeling, so in the general case, it can be called “the kneeler.” In fact, this is the name in the *Almagest*, for the name Hercules apparently was applied to this constellation some time after Ptolemy. Why he is kneeling is not clear, and depictions vary in certain details. These details include whether he is clothed or not, and if clothed, with what clothing. A common depiction is with lion skin clothing. In one hand he usually holds a club, but the purpose of that is not clear. In the other hand he holds various things, but frequently it is a branch with heads popping out. In all the depictions one foot lies above the head of Draco. In modern times, we think of Draco as a dragon, but in ancient depictions, Draco is a snake. Indeed, in many ancient languages, including biblical languages, there is no distinction between snakes and dragons. Of course, the parallel to the first messianic prophecy found in Genesis 3:15 is striking and not forced like so many other connections made by proponents of the gospel in the stars. Since this knowledge of the bruising of the Messiah’s heel and the crushing of the serpent’s head was known from the earliest times, it is possible that this one constellation may be a memorial to the coming Messiah, albeit with embellishments of unknown origins. I find it remarkable that gospel in the stars advocates do not emphasize this one

constellation more than they do.

In addition to this one possible vestige of a biblical message found in the constellation of the kneeler, I find Proctor’s suggestion of the memorial of the Flood in a sequence of constellations compelling. I would not dogmatically state that this is indeed what these are, but I would not rule out these few examples either.

References

- Allen, R.H. 1963. *Star names: Their lore and meaning*. New York, New York: Dover.
- Bowden, M. n.d. *The gospel in the stars*. Retrieved from <http://www.ldolphin.org/zodiac/>.
- Bruce, F.F. 1985. *The epistle of Paul to the Romans (Tyndale New Testament commentaries)*. Grand Rapids, Michigan: Eerdmans.
- Bullinger, E.W. 1893. *The witness of the stars*. Repr. Grand Rapids, Michigan: Kregel, 1967.
- Custer, S. 1977. *The stars speak: Astronomy in the Bible*. Greenville, South Carolina: Bob Jones University Press.
- Faulkner, D. 1998. Is there a gospel in the stars? *Creation Ex Nihilo Technical Journal* 12, no.2:169–172.
- Faulkner, D. 2010. An evaluation of the Star of Bethlehem DVD. *Answers in Depth*. Retrieved from <http://www.answersingenesis.org/articles/aid/v5/n1/star-of-bethlehem-dvd>.
- Gall, J. 1871. *Primeval man unveiled: or, the Anthropology of the Bible*. London, United Kingdom: Hamilton Adams, and Company.
- Ideler, L. 1809. *Untersuchungen über den ursprung und die bedeutung der sternnamen: Ein beytrag zur geschichte des gestirnten himmels*. Berlin, Germany: Johann Friedrich Weifs.
- Haslam, W. 1849. *The cross and the serpent: A brief history of the triumph of the cross, through a long series of ages, in prophecy, types and fulfilment*. Oxford and London, United Kingdom: John Henry Parker.
- Hendrikson, W. 1981. *Exposition of Paul’s epistle to the Romans*. Grand Rapids, Michigan: Baker.
- Holden, J.H. 2008. *Five medieval astrologers*. Tempe, Arizona: American Federation of Astrologers.
- Josephus, F. 1897. Antiquities of the Jews. In *The works of Flavius Josephus*. Trans. W. Whiston. London, United Kingdom: Ward, Lock & Bowden.
- Kennedy, D.J. 1989. *The real meaning of the zodiac*. Fort Lauderdale, Florida: Coral Ridge Ministries.
- Kunitzsch, P. and T. Smart. 2006. *A dictionary of modern star names: A short guide to 254 star names and their derivations*, 2nd ed. Cambridge, Massachusetts: Sky Publishing.
- Lilly, W. 1647. *Christian astrology*. London, United Kingdom: Brudenell. Repr. Bel Air, Maryland: Astrology Classics, 2004.
- Lisle, J. 2006. The star of Bethlehem: A supernatural sign in the heavens? *Answers* 1, no.2: 42, 51–52, 84. Retrieved from <http://www.answersingenesis.org/articles/am/v1/n2/star-of-bethlehem>.
- Maunder, E.W. 1904. *Astronomy without a telescope: A guide to the constellations and introduction to the study of the heavens with the unassisted sight*. London, United Kingdom: W. Thacker & Company.

- Maunder, E.W. 1908. *The astronomy of the Bible*. New York, New York: Mitchell Kennerley.
- Mayhue, R.L. 2008. Is nature the 67th book of the Bible? In *Coming to grips with Genesis*, ed. T. Mortenson and T.H. Ury, pp. 105–130. Green Forest, Arkansas: Master Books.
- McClain, A.J. 1973. *Romans: The gospel of God's grace*. Chicago, Illinois: Moody.
- Olcott, W.T. 1911. *Star lore: Myth, legends, and facts*. New York, New York: G.P. Putnam and Sons. Repr. Minoela, New York: Dover, 2004.
- Proctor, R.A. 1877. *Myths and marvels of astronomy*. New York, New York: G.P. Putnam's Sons.
- Rolleston, F. 1865. *Mazzaroth: Or, the constellations*. London, United Kingdom: Rivingtons. Repr. York Beach, Maine: Weiser Books, 2001.
- Schiaparelli, G. 1905. *Astronomy in the Old Testament*. Oxford, United Kingdom: Clarendon Press.
- Schreiner, T.R. 1998. *Romans (Baker exegetical commentary on the New Testament)*. Grand Rapids, Michigan: Baker.
- Seiss, J.A. 1882. *The gospel in the stars*. Philadelphia, Pennsylvania: E. Claxton & Company. Repr. Grand Rapids, Michigan: Kregel, 1972.
- Setterfield, B. n.d. *Is there a gospel in the stars?* Retrieved from <http://www.setterfield.org/stargospel.html>.
- Stifter, J.M. 1897. *The epistle to the Romans*. New York, New York: Gleaming H. Revell. Repr. Chicago, Illinois: Moody, 1960.
- Strong, J. 1890. *The exhaustive concordance of the Bible*. New York, New York: Abingdon.
- Trench, R.C. 1850. *The star of the wise men: A commentary on the second chapter of St. Matthew*. Philadelphia, Pennsylvania: H. Hooker.
- Wieland, C. 1998. Comment. *Creation Ex Nihilo Technical Journal* 12, no.2:172–173.
- Wise, K. 2001. *Faith, form, and time: What the Bible teaches and science confirms about creation and the age of the universe*. Broadman and Holman: Nashville, Tennessee.