Dieter Koch

The Star of Bethlehem

Translated from the German by Dieter Koch Edited by Wayne Turner

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About the Author

Dieter Koch, born 1959 in Switzerland, graduated from the University of Zürich in 1984 with a Master's degree in philosophy, Sanskrit and Ancient Greek. Before and after graduation, he also attended classes in Egyptology (Peter Kaplony) and Mathematics for three semesters and Hebrew for two semesters.

Between 1982 and 1989, Koch studied Vedic philosophical literature and worked on his annotated German translation of the Bhagavadgita, which he revised and published in 2008. (www.bhagavadgita.ch).

From 1988 on, Koch studied celestial mechanics, history of astrology, and computer programming. In 1997, he created the *Swiss Ephemeris* (together with Alois Treindl, astro.com), an electronic ephemeris software based on JPL ephemerides, which is used for ancient (as well as modern) astrology and for archaeoastronomy. Koch still keeps the Swiss Ephemeris up to date implementing new JPL ephemerides, ΔT and precession models, etc.

In 1995/1996, Koch attended language classes in Arabic (Benedikt Reinert). Since 2004, he has attended Akkadian classes at the University of Zürich (Margaret Jaques; with Christoph Uehlinger and Walter Burkert (†) as participants). In 2011/12, he learned Syriac.

Koch has been working on the Star of Bethlehem since 1994. The first version of the book appeared in German in 2004.

Other works by Dieter Koch on ancient astronomy and astrology are: "Astronomical Dating of the Mahabharata War" (2014/2015) "Die Sonnenfinsternis von Troia" ("The Solar Eclipse of Troy", in German, 2016) I thank Silvia Benz, Bernard Rindgen, Angelika Flegg, Ulrich Voigt, Bruce Killian, Rafael Gil Brand, Chris Brennan, Kevin A. Lee, Dwight Hutchison, and Wayne Turner for reading and critical comment on this book and for their help in its presentation.

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Introduction

Many Bible scholars doubt that the biblical account of the Star of Bethlehem refers to an actual historical event. In a scientific work on the life of the historical Jesus one reads:

Moreover, as in the history of religion there are many parallels of a star signalling the birth of a king, the persecution of a new-born king and even the offering of gifts in honour of a god born of a virgin-mother, many commentators consider it absurd to seek for a historical core to Matthew 2 (= account of the magi and the star in the Gospel of Matthew chapter 2).¹

The story of the magi and the star appears only in Matthew – and, at best, in a few apocrypha. This story is missing in the other three Gospels. So, the question is, did the other Gospel writers not know about it? Did Matthew even invent it?

One needs to differentiate, however, between the legend of the magi and the tradition about the star associated with the birth of Jesus. Although the story of the magi is found only in Matthew, there are quite a number of references in other New Testament texts that allude more or less directly to the star of the Messiah, for example those referring to Jesus as the "morning star" (Rev. 22:16; 2 Peter 1:19). Even in the Gospels of Luke and John such allusions appear, e. g. in the expression "the rising from on high" (Luke 1:78) or "the light in the darkness" (John 1:9). All these references are relatively inconspicuous, and it is clear that New Testament writings did not give special attention to Jesus' birth star. Still, these references are scattered throughout so many different texts that the story of the star must be based on a very early and wide-spread tradition. At least, it cannot be just an invention of Matthew.

Of course, this does not mean that the story about the star goes back to a real historical phenomenon. However, even if it were nothing but an invention, the question arises what kind of phenomenon early Christians could have thought of. This question is not irrelevant for the history of Christianity.

Whatever the case may be – the legend has fascinated astronomers and historians sufficiently for them to embark on a search for an extraordinary astronomical phenomenon that could have occurred at the time of Jesus' birth, in spite of the opinion of Bible scholars in the quote above.

Theories based on the account of the star are varied and numerous, and in view of this variety every attempt at solving the problem conclusively may appear futile from the start. In spite of this, this author wants to embark on the venture because he believes that he does have a good theory. In his

¹ Gerd Theissen/Annette Merz, Der historische Jesus, p. 150.

view, the fact that no other author has reached the same conclusions is not due to a lack of clarity in the Biblical texts but rather the result of traditional prejudices about what kind of heavenly phenomenon would have been sufficiently worthy of indicating a Messianic birth. These prejudices are sufficiently powerful in themselves to make a clear view of the textual evidence impossible and to prevent a solution to the problem.

One of the reasons why these prejudices persist and why they are so hard to overcome lies in the fact that hardly any of the authors who have written on the subject have researched ancient astrology and magical practices adequately. They naively believe they already know what astrology and magic were about and set out from some very ill-considered and downright naive ideas about these subjects. One of these is the idea that the star must have been an altogether extraordinary and conspicuous phenomenon. However, what was relevant for ancient astrologers was not necessarily grandiose. Only what the magi would have considered relevant in terms of their specific knowledge is significant, not what a modern reader consider important. Moreover, the question of how frequently a particular astronomical phenomenon appeared, was not necessarily easy to answer for ancient astrologers. The question of statistical frequency does not even appear in ancient astrological literature. It is obvious that speculative assumptions of this kind make it impossible to arrive at the truth of the matter. Because of such prejudices, it also happens that important pointers in the Bible are not considered with appropriate attention because the truth is located in a "blind spot". Such authors are even willing to accept explanations that specifically contradict statements made in the Biblical texts.

The philologist would surely notice that the majority of attempts at an astronomical explanation do not take statements in Matthew into account. Some even contradict them blatantly. Some are no more than speculations and, at best, the text is only considered when it serves their particular point of view. Thus, anything becomes possible. While Matthew tells of a "star that appeared in the east", some authors conjecture that the Moon was covering a planet or that there was a conjunction of two planets - two of the most curious and, at the same time, most popular variants on the theme. The present work therefore understands itself as an attempt to take Matthew's both overt and hidden astronomical hints more seriously than other authors do. Also, it will be attempted to unveil comprehensively the culture-historical context of Matthew's "star", i.e. its relations with other biblical as well as nonbiblical texts. Even if the account of the "three holy kings" or "wise men" were considered a myth, this author believes that that this myth, if taken seriously and seen in its textual and historical contexts, excludes all the other existing theories and simultaneously points to a clearly identifiable astronomical phenomenon.

The Bible itself calls Jesus "the bright morning star" (ὁ ἀστὴρ ὁ λαμπρὸς ὁ πρωϊνός, Revelation 22:16). This can actually only refer to Venus. Even if

this reference is ignored, it will be shown that the description of Matthew points to the heliacal rising of exactly this planet. Moreover, the legend of the virgin birth, as well as John's vision of the Woman of the Apocalypse indicate that Jesus' birth was assumed in the time of astrological Virgo and on a new moon, which most likely was the Jewish New Year (*Rosh hashanah*). This configuration actually occurred on 1 September 2 BCE.

However, the point of departure for this investigation should be the Gospel of Matthew. The "report" of the Star of Bethlehem is found in chapter 2. The *Amplified Bible* translates it as follows:

(1) Τοῦ δὲ Ἰησοῦ γεννηθέντος ἐν Βηθλέεμ τῆς Ἰουδαίας ἐν ἡμέραις Ἡρώδου τοῦ βασιλέως, ἰδοὺ μάγοι ἀπὸ ἀνατολῶν παρεγένοντο εἰς Ἱεροσόλυμα

(1) Now when Jesus was born in Bethlehem of Judea in the days of Herod the king, behold, wise men [astrologers] from the east came to Jerusalem, asking,

(2) λέγοντες· Ποῦ ἐστιν ὁ τεχθεὶς βασιλεὺς τῶν Ἰουδαίων; εἴδομεν γὰρ αὐτοῦ τὸν ἀστέρα ἐν τῇ ἀνατολῇ καὶ ἦλθομεν προσκυνῆσαι αὐτῷ.

(2) Where is He Who has been born King of the Jews? For we have seen His star in the east at its rising and have come to worship Him.

(3) ἀκούσας δὲ ὁ βασιλεὺς Ἡρῷδης ἐταράχθη καὶ πᾶσα Ἱεροσόλυμα μετ' αὐτοῦ,

(3) When Herod the king heard this, he was disturbed and troubled, and the whole of Jerusalem with him.

(4) καὶ συναγαγών πάντας τοὺς ἀρχιερεῖς καὶ γραμματεῖς τοῦ λαοῦ ἐπυνθάνετο παρ' αὐτῶν ποῦ ὁ χριστὸς γεννᾶται.

(4) So he called together all the chief priests and learned men (scribes) of the people and anxiously asked them where the Christ was to be born.

(5) οἱ δὲ εἶπαν αὐτῷ· Ἐν Βηθλέεμ τῆς Ἰουδαίας· οὕτως γὰρ γέγραπται διὰ τοῦ προφήτου·

(5) They replied to him, In Bethlehem of Judea, for so it is written by the prophet:

(6) Καὶ σύ, Βηθλέεμ γῆ Ἰούδα, οὐδαμῶς ἐλαχίστη εἶ ἐν τοῖς ἡγεμόσιν Ἰούδα· ἐκ σοῦ γὰρ ἐξελεύσεται ἡγούμενος, ὅστις ποιμανεῖ τὸν λαόν μου τὸν Ἱσραήλ.

(6) And you Bethlehem, in the land of Judah, you are not in any way least or insignificant among the chief cities of Judah; for from you shall come a Ruler (Leader) Who will govern and shepherd My people Israel.

(7) Τότε Ἡρῷδης λάθρα καλέσας τοὺς μάγους ἠκρίβωσεν παρ' αὐτῶν τὸν χρόνον τοῦ φαινομένου ἀστέρος,

(7) Then Herod sent for the wise men [astrologers] secretly, and accurately to the last point ascertained from them the time of the appearing of the star [that is, how long the star had made itself visible since its rising in the east].

(8) καὶ πέμψας αὐτοὺς εἰς Βηθλέεμ εἶπεν· Πορευθέντες ἐξετάσατε ἀκριβῶς περὶ τοῦ παιδίου· ἐπὰν δὲ εὕρητε, ἀπαγγείλατέ μοι, ὅπως κἀγὼ ἐλθὼν προσκυνήσω αὐτῷ.

(8) Then he sent them to Bethlehem, saying, Go and search for the Child carefully and diligently, and when you have found Him, bring me word, that I too may come and worship Him.

(9) οἱ δὲ ἀκούσαντες τοῦ βασιλέως ἐπορεύθησαν, καὶ ἰδοὺ ὁ ἀστὴρ ὃν εἶδον ἐν τῆ ἀνατολῆ προῆγεν αὐτούς, ἕως ἐλθὼν ἐστάθη ἐπάνω οὖ ἦν τὸ παιδίον.

(9) When they had listened to the king, they went their way, and behold, the star which had been seen in the east in its rising went before them until it came and stood over the place where the young Child was.

(10) ἰδόντες δὲ τὸν ἀστέρα ἐχάρησαν χαρὰν μεγάλην σφόδρα.

(10) When they saw the star, they were thrilled with ecstatic joy.

(11) καὶ ἐλθόντες εἰς τὴν οἰκίαν εἶδον τὸ παιδίον μετὰ Μαρίας τῆς μητρὸς αὐτοῦ, καὶ πεσόντες προσεκύνησαν αὐτῷ, καὶ ἀνοίξαντες τοὺς θησαυροὺς αὐτῶν προσήνεγκαν αὐτῷ δῶρα, χρυσὸν καὶ λίβανον καὶ σμύρναν.

(11) And on going into the house, they saw the Child with Mary His mother, and they fell down and worshiped Him. Then opening their treasure bags, they presented to Him gifts--gold and frankincense and myrrh.

(12) καὶ χρηματισθέντες κατ' ὄναρ μὴ ἀνακάμψαι πρὸς Ἡρῷδην δι' ἄλλης ὁδοῦ ἀνεχώρησαν εἰς τὴν χώραν αὐτῶν.

(12) And receiving an answer to their asking, they were divinely instructed and warned in a dream not to go back to Herod; so they departed to their own country by a different way.

(13) Ἀναχωρησάντων δὲ αὐτῶν ἰδοὺ ἄγγελος κυρίου φαίνεται κατ' ὄναρ τῷ Ἰωσὴφ λέγων· Ἐγερθεὶς παράλαβε τὸ παιδίον καὶ τὴν μητέρα αὐτοῦ καὶ φεῦγε εἰς Αἴγυπτον, καὶ ἴσθι ἐκεῖ ἕως ἂν εἴπω σοι· μέλλει γὰρ Ἡρῷδης ζητεῖν τὸ παιδίον τοῦ ἀπολέσαι αὐτό.

(13) Now after they had gone, behold, an angel of the Lord appeared to Joseph in a dream and said, Get up! [Tenderly] take unto you the young Child and His mother and flee to Egypt; and remain there till I tell you [otherwise], for Herod intends to search for the Child in order to destroy Him.

(14) ὁ δὲ ἐγερθεὶς παρέλαβε τὸ παιδίον καὶ τὴν μητέρα αὐτοῦ νυκτὸς καὶ ἀνεχώρησεν εἰς Αἴγυπτον,

(14) And having risen, he took the Child and His mother by night and withdrew to Egypt

(15) καὶ ἦν ἐκεĩ ἕως τῆς τελευτῆς Ἡρῷδου· ἵνα πληρωθῆ τὸ ῥηθὲν ὑπὸ κυρίου διὰ τοῦ προφήτου λέγοντος· Ἐξ Αἰγύπτου ἐκάλεσα τὸν υἰόν μου.

(15) And remained there until Herod's death. This was to fulfil what the Lord had spoken by the prophet, Out of Egypt have I called My Son.

(16) Τότε Ἡρφδης ἰδὼν ὅτι ἐνεπαίχθη ὑπὸ τῶν μάγων ἐθυμώθη λίαν, καὶ ἀποστείλας ἀνεῖλεν πάντας τοὺς παῖδας τοὺς ἐν Βηθλέεμ καὶ ἐν πᾶσι τοῖς ὑρίοις αὐτῆς ἀπὸ διετοῦς καὶ κατωτέρω, κατὰ τὸν χρόνον ὃν ἠκρίβωσεν παρὰ τῶν μάγων.

(16) Then Herod, when he realised that he had been misled by the wise men, was furiously enraged, and he sent and put to death all the male children in Bethlehem and in all that territory who were two years old and under, reckoning according to the date which he had investigated diligently and had learned exactly from the wise men.

In the Days of Herod

Herod's Death

The Gospels provide various scraps of historical information that can be used to limit the period during which Jesus must have been born. Let us therefore attempt to interpret these historical references before turning to astronomy, astrology and the magi. Unfortunately, such an investigation is hampered by the fact that present-day knowledge of historical events in Palestine during those years is fragmentary. In addition, the information given in the Gospels is not very precise, full of historical problems, and possibly not correct in every case. Let us look at them one by one. Since the matter is extremely complicated and confusing and even experts do not arrive at a consensus, and since this author has nothing new to add to the many controversies, he shall content himself with a brief summary of the state of the discussion as he sees it.

According to Matthew 2:1, Jesus was born "in the days of Herod" ($\dot{\epsilon}v$ $\dot{\eta}\mu\dot{\epsilon}\rho\alpha\iota\zeta$ Ήρ $\phi\delta$ ου τοῦ βασιλέως). Most authors therefore consider it likely that Jesus was born before the death of Herod. Thus, the question arises when Herod died. The majority of experts believes that he died in March or April 4 BCE. This consensus goes back to Emil Schürer's book *Geschichte des jüdischen Volkes im Zeitalter Jesu Christi*², which was published in the year 1898. However, this date should not be considered a firmly established historical fact. Some authors argue the case for Herod's death in 1 BCE.³ Furthermore, it must be noted that all early Christian authors, without any exception, date the birth of Jesus to the year 3 or 2 BCE.

Unfortunately, the statements made by the Jewish historian *Josephus Flavius* about the beginning and the period of Herod's rule are rather confusing and controversial. Herod was appointed king by the Roman senate, but he could only assume office after he had defeated the previous king Antigonus and conquered Jerusalem. According to Josephus, and counting from his appoint-

² Vol. 1, pp. 415-417, footnote 167. There is an English translation of the work under the title "A History of the Jewish People in the Time of Jesus Christ".

³ Filmer, "The Chronology of the Reign of Herod the Great", in: *The Journal of Theological Studies* 17 (1966) 283-98; Finegan, *Handbook of Biblical Chronology* (1998), S. 319 (§ 549); Martin, *The Birth of Christ Recalculated*; Martin, *The Star that Astonished the World*, S. 103-155; Edwards, "Herodian Chronology", PEQ 114 (1982) 29-42; Edwards, *The Time of Christ*; Steinmann, "When did Herod the Great Reign?"

The arguments of these authors are of course criticised by those who follow Schürer's dating. Vide Johnson, "And they Went Eight Stades toward Herodeion", in: Vardaman/Yamauchi, *Chronos, Kairos, Christos*, pp. 93-99, as well as the other sources mentioned there. Vide also Hoehner, "The Date of the Death of Herod the Great", op. cit., pp. 101-111.

ment, Herod then reigned for 37 years, or 34 years when counted from when actually he assumed office. Unfortunately, ancient sources date the fall of Jerusalem inconsistently, that is between 38 and 36 BCE. The year that Herod was appointed king is also disputed. And last but not least, there is the important question how years of rule in ancient Israel should be counted: for instance, whether a new Jewish year, which is just a few days old, should be counted as a whole year of reign, or not. If so, Herod could have died in the year 4 BCE, but otherwise, the date of his death would fall between 3 and 1 BCE. However that may be, what seems to be clear is that Jesus was *not* born in the year 1 according to the common calendar but somewhat earlier.⁴

Now according to Josephus Flavius, Herod died soon after a lunar eclipse⁵, and he was buried before the Passover following it. Unfortunately, this information does not allow definite dating either. Most historians agree that the lunar eclipse referred to is the one that took place in the early hours of 13 March 4 BCE.⁶ Other authors object that the period of time between this lunar eclipse and Passover, which is roughly the time between Herod's death and his funeral, was too short for all the events that Josephus records to have happened during it. In addition, this lunar eclipse has the problem that only just over a third of the Moon's diameter was covered, and it was not easy to observe in the early hours of the morning. For these reasons, other eclipses have been proposed that occurred in the years 5 BCE⁷, 1 BCE⁸ and 1 CE⁹. Those who assume Herod's death in 1 BCE at the latest, e. g. Ernest Martin, argue that the lunar eclipse during the night of 9/10 January 1 BCE, was a total eclipse and easily observable from Jerusalem. Also, it is more consistent with the events recorded by Josephus that apparently occurred between the death of Herod and his funeral.

Unfortunately, the eclipse of the year 1 BCE also has certain problems; it seems to be inconsistent with the periods of the reigns of Herod's sons. Each of them received a part of the kingdom and they counted their reign from 4 BCE. But this does not automatically imply Herod's death to be in 4 BCE.¹⁰ According to Josephus, in this year Herod appointed his son Antipater as his

 $^{^4}$ Counting time in history has no year 0; instead the year 1 CE follows straight after the year 1 BCE.

⁵ Josephus Flavius, Jewish Antiquities, XVII.6.4.

⁶ Schurer, *The History of the Jewish People in the Age of Jesus Christ*, 1,326-8, n.165.

⁷ Barnes, "The Date of Herod's Death", in: *The Journal of Theological Studies* 19 (1968) 204-9.

⁸ Filmer, Finegan, E. Martin, Steinmann, vide above, p. 13 footnote 3.

⁹ Pratt, "Yet Another Eclipse for Herod", in: *The Planetarium* 19 (1990) 8-13.

¹⁰ The following details were taken from: Martin, *The Star that Astonished the World*, p. 209ff.

co-regent.¹¹ However, Antipater wanted to do away with Herod and when the plan failed, Herod had him executed. Most historians assume that Herod died soon after this and that Archelaus became his successor. Josephus, however, reports that Archelaus had "exerted royal authority for a long time already" when he took office.¹² The same may apply to Archelaus' brother Antipas, who also inherited part of the kingdom. Thus it seems that Herod continued to live for a period after this and that Archelaus and Antipas pre-dated their taking office, calculating from 4 BCE. Again according to Josephus, another son of Herod, Philip II, allegedly was in power for 37 years and died either in the 20th or the 22nd year of Tiberius, that is, in the year 34 or 36 CE. The uncertainty of the death year arises from different text variants.¹³ Depending on the variant one chooses, either the year 4 or the year 1 BCE seems to be correct.

There are other problems that need not be discussed here, as their details are, again, very complicated and hard to disentangle. Also, the historical information given in the Gospels is so full of problems that it would not be wise to rely too much on the statement that Jesus was born during the reign of Herod. It has also been suggested that, rather than Herod the Great, his son Herod Archelaus or Herod Antipas could be referred to in the Gospels, both of which were also called by the name of Herod (e. g. Luke 3:1).¹⁴ A Jewish informant of the philosopher Celsus of Alexandria (2nd century CE), was of this opinion, too.¹⁵ On the other hand, this theory contradicts Matthew 2:22, where it is stated that after the death of Herod and the accession of Archelaus, the holy family returned from Egypt and lived in Nazareth.

Unfortunately, there is little hope that experts will ever be able to resolve all these controversies and contradictions. At the current state of the discussion, it at least can be stated: If the statement "in the days of Herod" is correct at all, Jesus cannot have been born after the lunar eclipse of 9/10 January 1 BCE.

¹¹ Josephus Flavius, Jewish Antiquities, XVII.2.

¹² Josephus Flavius, War of the Jews, II.26.

¹³ Josephus Flavius, *Jewish Antiquities* XVIII,106. Most scholars follow a text variant according to which Phillip died in the 20th year of Tiberius. However, the original wording was clarified by David W. Beyer in the 1990s, and it reads: "in the 22nd year". See Martin, *The Star that Astonished the World*, p. 112f.

¹⁴ Smith, "Of Jesus and Quirinius", *The Catholic Biblical Quarterly*, 62:2 (April, 2000), p. 278-93.

¹⁵ According to Origenes, Contra Celsum 1.58.

Quirinius and the Census

A further historical clue concerning the birth date of Jesus is given in the Gospel of Luke.

 Έγένετο δὲ ἐν ταῖς ἡμέραις ἐκείναις ἐξῆλθεν δόγμα παρὰ Καίσαρος Αὐγούστου ἀπογράφεσθαι πᾶσαν τὴν οἰκουμένην.

(1) And it came to pass in those days, that there went out a decree from Caesar Augustus that all the world should be taxed.

(2) αὕτη ἀπογραπὴ πρώτη ἐγένετο ἡγεμονεύοντος τῆς Συρίας Κυρηνίου.

(2) (And this taxing was first made when Cyrenius was governor of Syria.)

(3) καὶ ἐπορεύοντο πάντες ἀπογράφεσθαι, ἕκαστος εἰς τὴν ἑαυτοῦ πόλιν.

(3) And all went to be taxed, every one into his own city.

(4) Ἀνέβη δὲ καὶ Ἰωσηφ ἀπὸ τῆς Γαλιλαίας ἐκ πόλεως Ναζαρὲθ εἰς τὴν Ἰουδαίαν εἰς πόλιν Δαυὶδ ἥτις καλεῖται Βηθλέεμ, διὰ τὸ εἶναι αὐτὸν ἐξ οἰκοῦ καὶ πατριᾶς Δαυίδ,

(4) And Joseph also went up from Galilee, out of the city of Nazareth, into Judaea, unto the city of David, which is called Bethlehem; (because he was of the house and lineage of David:)

(5) ἀπογράψασθαι σὺν Μαριὰμ τῃ ἐμνηστευμένῃ αὐτῷ, οὕσῃ ἐγκύῳ.

(5) To be taxed with Mary his espoused wife, being great with child.

(6) Εγένετο δὲ ἐν τῷ εἶναι αὐτοὺς ἐκεῖ ἐπλήσθησαν αἱ ἡμέραι τοῦ τεκεῖν αὐτήν,

(6) And so it was, that, while they were there, the days were accomplished that she should be delivered.

(7) καὶ ἔτεκεν τὸν υἰὸν αὐτῆς τὸν πρωτότοκον, καὶ ἐσπαργάνωσεν αὐτὸν καὶ ἀνέκλινεν αὐτὸν ἐν φάτνῃ, διότι οὐκ ἦν αὐτοῖς τόπος ἐν τῷ καταλύματι.

(7) And she brought forth her firstborn son, and wrapped him in swaddling clothes, and laid him in a manger; because there was no room for them in the inn. (Luke 2:1-7, King James Version)

The question arises, when was *Cyrenius* "governor" (Greek $\dot{\eta}\gamma\epsilon\mu\nu\nu\epsilon\dot{\nu}\nu\nu\epsilon,$ Latin *a praeside*) of Syria and when did he call for a census? If one knew that, one could date the birth of Jesus. Unfortunately, the present-day historical knowledge about these years in Syria and Palestine is so limited that even this question cannot easily be answered.

To begin with, there was in fact a "governor" of Syria named Quirinius. "Cyrenius" (Kupήvio ς) is clearly the Greek form of this Roman name. According to Josephus Flavius, this Quirinius did, in fact, conduct a census in Palestine, however, only in the years 6 and 7 CE, and therefore not in the period that can be considered for the birth of Jesus. As most historians assume Herod's death to have occurred in the year 4 BCE, and in any case in 1 BCE at the latest, they have concluded that Luke must have made a mistake. Some even consider the census a mere invention and that Jesus was actually born in Nazareth. The story that Mary and Joseph had to go to Bethlehem in order to have themselves registered, could have been invented for the purpose to let the birth of the Messiah take place in Bethlehem, where an Old Testament prophecy had allegedly predicted it.

Nevertheless, there have been numerous attempts to maintain the census in one way or the other. Church Father Tertullian (200 CE) already supposed that the census was actually conducted by the governor Gaius Sentius Saturninus, who, however, was in office between 9 and 6 BCE.¹⁶ The American astronomer Michael Molnar believes that Luke was mislead by coins from Antioch of the years 7 to 12 CE. These coins show the constellation of Aries and a star. Luke, who stemmed from Antioch, could have considered this star to have been the star of the Messiah and wrongly identified the census, which had actually been conducted by Saturninus, with that conducted by Quirinius in 6/7 CE. Because of the depiction of the ram, the same coins could also have been reminiscent of Luke's story of the shepherds and their sheep.¹⁷ Although an explicit report of a birth star is absent in Luke, one can interpret the words "the rising from on high" in Luke 1:78 as an allusion to Matthew's rising star. It thus seems that Luke knew of the legend of the birth star.

Also important is the question of how verse 2 in Luke's report has to be understood. In Greek it reads as follows:

(2) αὕτη ἀπογραπὴ πρώτη ἐγένετο ἡγεμονεύοντος τῆς Συρίας Κυρηνίου.

However, this is equivocal and could be understood in two ways:

- (a) "This was the first census that took place when Quirinius was the governor of Syria." I. e., this census was the first one out of two, both of which took place at the time when Quirinius was governor of Syria.
- (b) "This was the first census, which took place when Quirinius was the governor of Syria." I. e., this census was the first census ever conducted in Syria, and it took place when Quirinius was governor of Syria.

However, in both cases an error has to be assumed in Luke's report, because Quirinius was not governor of Syria in the time of Herod. Some have also attempted to interpret Luke's statement as follows¹⁸:

(c) "This census was the first one in Judaea [before] the one that took place when Quirinius was governor of Syria." I. e., the census did not take place under Quirinius but several years before his own census.

Unfortunately, this "solution" violates the rules of Greek syntax.¹⁹

¹⁶ Tertullian, Adversus Marcionem, 4.19.

¹⁷ Molnar, *The Star of Bethlehem*, p. 119-122.

¹⁸ Hoehner, *Chronological Aspects of the Life of Christ*, S. 21; L. H. Feldman in:
W. Brindle, "The Census and Quirinius: Luke 2:2", JETS 27 (1984), 48-49.

There are other approaches to solve this problem. Martin thinks, referring to Justin Martyr, that Quirinius had carried out the census when he was a special envoy (Lat. *procurator*) of the emperor, thus not as a governor (*legatus pro praetore*).²⁰ Martin and Papke²¹ therefore consider that Quirinius must already have been a "procurator" of Augustus in Syria, as early as the years 3 and 2 BCE. They even assume that Quirinius had taken over the

¹⁹ The word πρῶτος constructed with genitive case appears in the sense of "earlier than, before" in John 1:15 and 30 (ὅτι πρῶτός μου ἦν). However, this is a rather unusual construction that only appears in the Gospel of John, and nowhere else in the New Testament or the Septuagint. Apart from that, it cannot be compared with the syntactical construction in Luke 2:2. Usually, one would construe ἡγεμονεύοντος τῆς Συρίας Κυρηνίου as a *genitivus absolutus*, not as a *genitivus comparationis* dependent on πρώτη. Instead of the latter construction, Luke would rather have used the preposition πρό. An example is found in the same chapter (2:21 πρὸ τοῦ συλλημφθῆναι αὐτὸν ἐν τῆ κοιλία). The Vulgate as well as the Peshitta are of the opinion that the census was carried out under Quirinius. Justin Martyr also paraphrases Luke's sentence using a *genitivus absolutus* (*First Apology* 34, Κυρηνίου ... ἐν Ιουδαία πρώτου γενομένου ἐπιτρόπου) In Antiquity, Luke was always understood like that. It just was the most natural way to read it.

N.T. Wright translates Luke as follows (Who was Jesus?, p. 88f.):

αὕτη ἀπογραπὴ πρώτη ἐγένετο ἡγεμονεύοντος τῆς Συρίας Κυρηνίου.

"This census took place before the time when Quirinius was governor of Syria."

Taking into account the syntax of Lk 2:21, Luke most likely would have rendered this statement as follows:

*αὕτη ἡ ἀπογραφὴ ἐγένετο πρὸ τοῦ ἡγεμονεύειν Κυρήνιον τῆς Συρίας.

Also possible would have been the following wording:

*αὕτη ἡ ἀπογραφὴ ἐγένετο πρὸ τῆς τοῦ Κυρηνίου ἡγεμονίας τῆς Συρίας.

The article $\dot{\eta}$ inserted after $\alpha \ddot{\upsilon} \tau \eta$ is desirable, although not absolutely mandatory. The word $\pi \rho \dot{\omega} \tau \eta$, which has been omitted, could also remain.

A slightly different translation with similar sense, which was also maintained by Wright (*Luke for Everyone*), reads as follows:

"This was the first registration, before the one when Quirinius was governor of Syria." For this rendering, the following correction would have to be made to the Greek

original in this author's opinion:

*αὕτη ἀπογραφὴ πρώτη ἐγένετο [πρὸ τῆς] Κυρηνίου ἡγεμονεύοντος τῆς Συρίας.

The word $\pi\rho\omega\tau\eta$ is not really required to produce the sense intended by Wright:

*αὕτη ἀπογραφὴ ἐγένετο [πρὸ τῆς] Κυρηνίου ἡγεμονεύοντος τῆς Συρίας.

Interestingly, this wording is very close to Luke, the corrections made are small: The word $\pi\rho\dot{\omega}\tau\eta$ was replaced by $\pi\rho\dot{\upsilon}\tau\eta\varsigma$, which sounds similar, and the word order was changed. Could this have been the wording of Luke's source, and could Luke have misunderstood it?

²⁰ Martin, *The Star that Astonished the World*, p. 181ff; Justin Martyr, *Apologia prima* 34, Κυρηνίου... ἐν Ιουδαία πρώτου γενομένου ἐπιτρόπου.

²¹ Papke, Das Zeichen des Messias, p. 96ff.

position of governor from Saturninus in the spring of 2 BCE and gave it over to Varus in the autumn.²² If that is so, Quirinius would have held more than one census, and the census of about 6 or 7 CE would have been his second one. As Luke mentions the latter in Acts 5:37, it makes sense to understand the matter this way. However, all this remains rather speculative.

To what kind of census would he refer? The year 2 BCE was the 25th year of the reign of emperor Augustus. In this year of his reign, Augustus was given the title of *pater patriae*, ("Father of the Empire"). Some authors assume that it was as a result of this that "a decree went out from Caesar Augustus that the whole world should be enrolled." In fact, Josephus Flavius reports that approximately one year before Herod's death, Augustus ordered an oath of allegiance²³ to be sworn throughout his empire. This would have been in 3 or 2 BCE, if Herod died at the beginning of 1 BCE. Is this oath of allegiance what Luke refers to as "enrolment"?

If these surmises are correct, Jesus would have been born in 3 or 2 BCE.

30 Years Before the 15th Year of Tiberius

In the Bible, there are other references to the year of Jesus' birth. Luke writes that John the Baptist began to preach and to baptise in the Jordan River in the 15th year of the reign of Emperor Tiberius (Luke 3:1 ff.). Jesus also came to John to be baptised, and at that moment the Holy Spirit descended on him in the form of a dove. At this time, Jesus was about 30 years old (Luke 3:21ff.). In general, it is assumed that Jesus was baptised in the same year in which John started preaching. However, Luke does not state it expressly and it is not certain. The baptism of Jesus could also have taken place a few years later, however not later than 36 CE, the last year Pontius Pilatus was prefect of Judaea.

So, let it be assumed that Jesus became 30 years old and was baptised by John in the 15^{th} year of Emperor Tiberius. Tiberius acceded to the throne on 19 August 14 CE. Thus the 15^{th} year of his reign would have lasted from August 28 CE to August 29 CE. According to that, Jesus would have been born *between 3 and 2 BCE*.

Supporters of the theory of Jesus' birth before the year 4 BCE would have to interpret rather broadly the statement that he was "about 30 years old" when he started his ministry. If Jesus had been born around 7 BCE, it would include a period of between 26 to 34 years. However, by contrast early Christian authors assumed him to have been "fairly precisely 30 years old" at this point. In fact, this interpretation is more plausible, for the Greek text states literally:

²² Martin, op. cit., p. 196ff.; Papke, op. cit., p. 99.

²³ Josephus Flavius, Antiquities of the Jews XVII 2.4.

Kaì aὐτὸς ἦν Ἰησοῦς ἀρχόμενος ὡσεὶ ἐτῶν τριάκοντα, ... And Jesus himself was at the beginning of about 30 years. (Lk 3:23)

The Church Fathers understood this to mean that Jesus was almost exactly 30 years old. It should be noted that Luke says "at the beginning of" ($\dot{\alpha}\rho\chi\dot{o}\mu\epsilon\nu\sigma\varsigma$). What else could be the meaning of it if not that he had just become 30 years old? If one considers that according to Jewish tradition a person becomes spiritually mature and can become a priest at the age of 30, it seems that Luke had exactly this age in mind.²⁴ If one wants to date the birth of Jesus to 7 or 6 BCE, then Jesus would have been 33 or 34 years old in the 15th year of Tiberius. However, Luke does not seem to intend such a very rough information about the age of Jesus. According to Luke himself, the dead girl that Jesus calls back to life was "about 12 years old" ($\dot{\omega}\varsigma \dot{\epsilon}\tau\tilde{\omega}\nu \delta\dot{\omega}\delta\epsilon\kappa\alpha$, Luke 8:42). The inaccuracy of this statement could amount to a few months but certainly less than a year.

There have been attempts to calculate the birth of Jesus by the date of his crucifixion. Unfortunately, neither the date of the crucifixion, nor Jesus' age at crucifixion is easily determined.

As has been stated, Jesus was baptised by John at approximately 30 years of age. He then received the Holy Spirit and thereafter began his public ministry. The question is: How long did his public ministry last? According to the Gospels of Matthew, Mark and Luke, it could have been a year and a few months. According to the Gospel of John, it was probably three years and a few months. Therefore at the end of his life Jesus was probably between 31 and 33 years old. At least, this is the opinion of most ancient and modern scholars.

However, the Gospel of John seems to indicate in a few places that Jesus could have become considerably older. In John 8:57 it is stated that Jesus "does not have 50 years yet" (πεντήκοντα έτη οὕπω ἔχεις). And John 2:20 possibly indicates that at that time he was 46 years old. Moreover, Church Father Irenaeus (200 CE) asserts that the same information had come down to him not only through the Gospel of John, but also through other apostles:

Quia autem triginta annorum aetas prima indolis est juvenis, et extenditur usque ad quadragesimum annum, omnis quilibet confitebitur; a quadragesimo autem et quinquagesimo anno declinat jam in aetatem seniorem; quam habens Dominus noster docebat sicut Evangelium et omnes seniores testantur, qui in Asia apud Joannem discipulum Domini convenerunt, id ipsum tradidisse eis Joannem. Permansit autem cum eis usque ad Trajani tempora. Quidam autem eorum non solum Joannem, sed et alios apostolos viderunt, et haec eadem ab ipsis audierunt, et testantur de hujusmodi relatione.

That the period of life which is of young character is firstly of 30 years and extends until the 40^{th} year, will be admitted by everybody. And from the 40^{th} and the 50^{th} year on, it already declines into the more elderly age. The latter

²⁰

²⁴ Numbers 4:3, 23, 30, 35 and 39.

also had our Lord, when he was teaching, since the Gospel and all the Elders, who met in Asia [Minor] around John, the disciple of the Lord, testify that John told it to them. He (John) remained with them until the times of Trajan (98-117 n. Chr.). And some of them did not only see John, but also other apostles, and they heard the same things from them and testify this kind of report.²⁵

Unfortunately, these interesting statements, which give the impression of an historical testimony, cannot be reconciled with the information given by Luke, who says that Jesus was about 30 years old in the 15th year of Tiberius. If Luke's assertion were correct, then Jesus would have been born about 3 BCE. On the other hand, the crucifixion must have taken place by 36 CE, the last year Pilatus was in office. However, if Jesus had been 46 years old before 36 CE, he would have been born before the year 10 BCE.

The Crucifixion and the Eclipse

The Gospels state that the crucifixion took place on a Friday and that Jesus was taken from the cross before the sunset, which was the beginning of the Sabbath. Moreover, it is known that he was crucified on Passover or a day before, i.e. on the 14th or 15th of Nisan, depending on whether one wants to follow John or the Synoptics. Thirdly, it is known that the crucifixion must have taken place between 26 and 36 CE, when Pontius Pilatus was *procurator* of Judaea.

According to current historical works, only two dates fulfil these conditions: 7 April 30 CE and 3 April 33 CE.²⁶ However, the calculation of these dates was, unfortunately, based on assumptions about the then Jewish calendar making that were not quite correct.²⁷ The month used to begin after the observation of the first sliver of the new moon. However, when the Moon was still very close to the Sun or when clouds obstructed the view, the observation would have been difficult and the beginning of the month could have been delayed by one day. If so, the 14th and the 15th of Nisan would have fallen on different weekdays.

²⁵ Irenaeus, *Adversus haereses* II,22,5, PL 7/1, col. 784f. This passage is only partially preserved in Greek, namely in a quotation by Eusebius: καὶ πάντες οἱ πρεσβύτεροι μαρτυροῦσιν, οἱ κατὰ τὴν Ἀσίαν Ἰωάννῃ τῷ τοῦ Κυρίου μαθητῃ συμβεβληκότες, παραδεδωκέναι ταῦτα τὸν Ἰωάννῃν. Παρέμεινε γὰρ αὐτοῖς μέχρι τῶν Τραϊανοῦ χρόνων.

²⁶ Vide, e.g., Humphreys/Waddington, "Astronomy and the Date of Crucifixion", in: Vardaman/Yamauchi, *Chronos, Kairos, Christos*, pp. 165-181.

²⁷ The following explanations are mostly taken from Beckwith, "Cautionary Notes on the Use of Calendars and Astronomy to Determine the Chronology of the Passion", in: Vardaman/Yamauchi, *Chronos, Kairos, Christos*, pp. 183-205.

Furthermore, it must be noted that in the Jewish lunar year, 12 months lasted only 354 days and leap months had to be inserted every two or three years in order to keep the calendar in agreement with the solar year and the seasons. The intercalation was done before the beginning of the Passover month Nisan, which then was postponed by 29 or 30 days. Unfortunately, historians do not know in which years leap months were inserted. Whether or not this was done depended on the availability of mature barley in the fields, which was required for the Passover rites. Some publications assert that intercalation had to be done if the Passover would otherwise have taken place *before* the spring equinox. However, this is not true. Also, it must be noted that leap months were sometimes inserted in *two successive years* (possibly even three successive years, if the mature barley appeared very late), even though the difference between the lunar and the solar year lengths required intercalation only every two or three years.

From all this, it becomes obvious that there cannot be any certainty whether or not the above-mentioned crucifixion dates in the years 30 and 33 CE really coincided with the Jewish calendar dates required. In reality, Jesus probably could have been crucified in any year within Pilatus' term of office.

Are there other criteria to determine the year of the crucifixion? Is it perhaps a help that the Gospels allude to a solar eclipse that occurred during the crucifixion?

(44) Καὶ ἦν ἤδη ὡσεὶ ὥρα ἕκτη καὶ σκότος ἐγένετο ἐφ' ὅλην τὴν γῆν ἕως ὥρας ἐνάτης (45) τοῦ ἡλίου ἐκλιπόντος, ἐσχίσθη δὲ τὸ καταπέτασμα τοῦ ναοῦ μέσον. (46) καὶ φωνήσας φωνῆ μεγάλῃ ὁ Ἰησοῦς εἶπεν· Πάτερ, εἰς χεῖράς σου παρατίθεμαι τὸ πνεῦμά μου. τοῦτο δὲ εἰπὼν ἑξέπνευσεν.

(44) And it was about the sixth hour, and a darkness came over the whole earth (σκότος ἐγένετο ἐφ' ὅλην τὴν γῆν) until the ninth hour, (45) at which the sun was eclipsed (τοῦ ἡλίου ἐκλιπόντος); and the curtain in the temple tore down its middle. (46) And with a loud voice Jesus called out and said: "Father, into your hands I give my spirit!" And when he had said that, he breathed out the sprit. (Luke 23:44 ff.)²⁸

Unfortunately, a solar eclipse could not have taken place during a Passover for astronomical reasons, because the feast of Passover always coincides with a full moon, whereas solar eclipses take place on new moons. For this reason, some believe that the "darkness" must have been caused by a sand storm.

However, it is interesting that a partial *lunar* eclipse occurred the evening of 3 April 33 CE. Could the Gospel writers have exaggerated a lunar eclipse and made it into an eclipse of the Sun? Support for this explanation is perhaps given in Acts 2:20, where a "blood moon" is mentioned besides an eclipsed Sun. Some believe that this passage refers to the crucifixion and a

²⁸ Quotations from the Bible were translated from the original language by the author himself, unless another source is specifically named.

lunar eclipse²⁹. That the Gospels do not mention a lunar eclipse could also be explained by the fact that the crucifixion took place during the day, whereas lunar eclipses can be observed only after sunset. It was thus impossible to observe a lunar eclipse during the crucifixion.

However, in Palestine little or nothing would have been seen of this eclipse of 3 April 33 CE. In Jerusalem, the Moon rose only 16 minutes before leaving the Earth's umbral shadow, just at the time of sunset, and at this point the darkening only amounted to slightly more than 15%.³⁰ Did star gazers even notice this fast diminishing "dent" in the Moon, when the Moon itself was hardly visible as she was just above the horizon, in an evening sky that was still bright?³¹ This was certainly not a sensational and generally notice-able lunar eclipse.

In any case, this lunar eclipse could not have been a "blood moon", because this effect only appears with *total or near-total eclipses*. With a partial eclipse, the obscured part of the lunar disc appears black because of the strong contrast it forms with the bright part of the Moon; near the horizon, the obscured part could at best appear bluish. Thus if Humphreys and Waddington believe that the eclipse appeared reddish because the Moon was near the horizon, they might be mistaken. In reality, the obscured part of the lunar disc would have been black or bluish. Only the bright part could have appeared reddish, however, it would have done so for the same reason as any rising or setting full moon is of the same colour.

Now, in the Jewish lunar calendar, it was very easy to predict possible dates of eclipses. Lunar eclipses could be expected every six months in the middle of the month, solar eclipses every six months at the end of the month.³² Ancient astronomers would have looked out for eclipses on such dates. For long-term prediction of eclipses, astronomical algorithms were available, too. What is important is that *astrologers* would have considered eclipses astrologically relevant even if they were *not* observable. Hellenistic astrology was not interested in astronomical observation but fully relied on *calculated* horoscopes. It is therefore possible that early Christian astrologers investigated the crucifixion date in retrospect, several decades after the event,

²⁹ The reddish colour of a lunar eclipse is caused by sun light that traverses the outer layers of the earth atmosphere and is refracted towards the lunar disc. The colour effect is comparable to the red sky at dusk or dawn. However, the colour of lunar eclipses strongly depends on how many aerosols of volcanic origin happen to be in the atmosphere. After the eruption of the Philippine volcano Pinatubo in 1991, total lunar eclipses were almost black for several years, because the outer layers of the earth atmosphere were impervious to solar light rays.

 $^{^{30}}$ Calculations using JPL-Ephemerides DE406 and $\Delta T\text{-values}$ after Morrison/ Stephenson 2004.

³¹ Cf. Schaefer, "Lunar Visibility and the Crucifixion".

³² This method works very well for 6 or 7 six-month periods.

and noticed the possibility of a lunar eclipse. Thus, the question arises whether the "blood moon" could be explained by calculations that were made a lot later.

Alternatively, is there another possible crucifixion year, where a total lunar eclipse could be observed? In the year 36, there were two total lunar eclipses that were observable from Palestine, on the evening of 31 January and in the night of 26/27 July. However, these dates were quite far away from Passover, which in that year fell on the 30th March. The crucifixion date in 33 CE, which was a possible lunar eclipse date, would have fit better.

However, it is interesting that in the year 33 CE solar eclipses were expected to fall on highly symbolic days: firstly, on 19 March, which was about two weeks before Passover (and the crucifixion) and also *the beginning of the ecclesiastical and astrological year*. The other eclipse was to be expected on 12 September, *just before the civil and agricultural New Year* (Rosh hashanah). The latter eclipse could be observed from Palestine, although it reached only a magnitude of 20%. The former was not observable in Palestine, but could at least have been calculated. It follows that early Christian astrologers could have calculated a solar eclipse on the new moon before the crucifixion in 33 CE. The authors of the Gospels could have learned about it and "postponed" the eclipse to the day of the crucifixion. Symbolically, that would have made very good sense.

Coincidentally, good astronomical reasons can also be cited for the other possible crucifixion date in the year 30 CE. On 24 November 29 CE, a good four months before the crucifixion date, a total eclipse of the Sun occurred that could be observed from the Near East. The central line of the eclipse did not directly touch Jerusalem, only the more northerly Levant, e.g. Antioch on the Orontes (present-day Antakya), and it continued in a southeasterly direction.³³ Therefore, the eclipse was not total in Jerusalem. The occultation amounted to only 92% and, although visible, it was not as frightening as a total eclipse would have been. Still, it was certainly noticeable and disconcerting. Besides, fearsome prognoses deduced by astrologers, who used to interpret even partial or unobservable eclipses as bad omens, are likely to have been more crucial than the immediate impression that the eclipse made on the people. Also, reports from the northern Levant, where the eclipse was total, must also have reached Jerusalem. Therefore it is very likely that this event deeply alarmed people and caused them to expect calamitous, even apocalyptic, events in the near future, all the more so because the eclipse occurred in opposition to "malefic" Saturn.

³³ Using Δ T-Values of Morrison/Stephenson 2004 the uncertainty of Δ T for the year 0 amounts to approximately 70 seconds. (http://eclipse.gsfc.nasa.gov/SEcat5/uncertainty.html) The central line of the eclipse thus shifts by up to +/- 17.5 arc seconds in geographical longitude.

It is therefore quite possible that early Christians in retrospect linked the crucifixion with this total solar eclipse of 24 November 29 CE. In fact there is another clue in the Gospels that supports this theory. While all three synoptic Gospels report that darkness fell on the land from the sixth to the ninth hour, only Luke adds "the sun was eclipsed" ($\tau o \tilde{v} \dot{\eta} \lambda i o v \dot{\epsilon} \kappa \lambda i \pi o v \tau \sigma \varsigma$). Now Luke is said to have been from Antioch, which was located in the central path of the eclipse. Since Luke might have written his Gospel around 70 CE, he might have known people who had observed the eclipse with their own eyes, and it is very likely that he heard about it from them. It is therefore quite plausible that he would have linked this extraordinary eclipse with the crucifixion.

Luke's information on the duration of the eclipse is also worth studying. It allegedly lasted from the sixth hour to the ninth. Since hours were counted from sunrise, the eclipse would have begun between about 11 and 12 pm and ended between 2 and 3 pm. Now, the core shadow and the spectacular total eclipse arrived in Antioch at 11:18 am, thus in the sixth hour. While totality lasted only for about 70 seconds and was not observable in Jerusalem, as has been said, it is still interesting to study the duration of the *partial* phase, which could be observed through smoked glass. In Jerusalem it began at 9:53 am and ended at 12:43 pm; the times for Antioch are almost the same. The eclipse therefore lasted from the forth to the seventh hour. Although this information differs from Luke's by two hours, it is interesting that the duration itself matches Luke's report very well. The two-hour error could be explained by the fact that Luke wanted to adjust the eclipse to the time of the crucifixion. Otherwise, the error could have resulted from a misunderstanding of the fact that the total phase occurred in the 6th hour, but the whole eclipse lasted for three hours.

It follows that both possible crucifixion years, 30 CE as well as 33 CE are plausible, and astronomy is not able to provide an unequivocal solution to the question of the year of crucifixion. The question is made even more complicated by the fact that ancient astronomers and astrologers were able to calculate a possible eclipse for the new moon before Passover in the year 33 CE. It is even possible that the reports of the total solar eclipse of the year 33 CE. In any case, it has become clear that there is no need for a *sand storm* to explain the "eclipse of the sun" (Luke!) during the crucifixion. Instead, it is very likely that the Luke wrote his gospel under the impression of the total eclipse of 29 CE.

Even among early Christian authors, there are advocates for both possible crucifixion dates. Clement of Alexandria (2nd cent.) reports that several authors assumed the crucifixion to have taken place in 30 CE (in the 16th year of the reign of Tiberius).³⁴ However, Eusebius of Caesarea (3rd/4th cent. CE) argues

³⁴ Stromateis, 1.21.45; http://www.ccel.org/ccel/schaff/anf02.vi.iv.i.xxi.html.

in favour of the year 33 CE. He refers to the historian Phlegon of Tralleis (2nd cent.) who reports a total solar eclipse to have occurred in the 4th year of the 202nd Olympiad (i.e., in 33 CE). As a total solar eclipse took place only in 29 CE, it must be assumed that the text is corrupt. Probably Phlegon

Christian copyist later "corrected" it to read "the 4th year".³⁵

It has become obvious that astronomy is not able to provide a reliable date for the crucifixion. Still, if Jesus' maximum age is assumed to have been 33 years and the crucifixion to have taken place in the year 30 CE, then the year 4 BCE results as the *earliest possible year of his birth*. On the other hand, if it is assumed that Jesus was only 31 years old and that he was crucified in 33 CE, then the *latest possible year of his birth* is 2 CE. This is quite a wide range of time, but it is interesting in so far as *the year 7 BCE is once more shown to be unlikely for the birth of Jesus*.

originally wrote "in the 1st year of the 202nd Olympiad" (= 29-30 CE) and a

Summary

The Gospels give some historical information that has been used in attempts to date the birth and crucifixion of Jesus. Unfortunately, however, this information has a great number of problems and does not lead to unequivocal and reliable solutions. The discussions amongst experts are extremely complex and often based on nothing but assumptions and speculations.

- Both Matthew and Luke report that Jesus was born before the death of Herod the Great. It is generally assumed that this information is reliable. Unfortunately, however, the dating of the major events in Herod's life is uncertain. Most scholars believe that he died shortly after a lunar eclipse in the year 4 BCE, however others believe that an eclipse in 1 BCE fits better.

- Jesus was allegedly born during a census that was held under Quirinius as the governor of the Roman province of Syria. Unfortunately, however, the census conducted by Quirinius took place only in the year 6/7 CE. During the time Jesus was born, he was not even governor of Syria.

- According to Luke, John the Baptist began his ministry in the 15th year of Tiberius, and Jesus was "at the beginning" of 30 years when John baptised him. Unfortunately, scholars disagree on the exact meaning of this information, whether Jesus was rather exactly 30 years old or whether he could have been a couple of years older or younger.

- There have been attempts to determine the birth year of Jesus from the year of crucifixion. Unfortunately, there are controversies both about the year of the crucifixion and about the age of Jesus at the time he was crucified.

³⁵ Demandt, Verformungstendenzen in der Überlieferung antiker Sonnen- und Mondfinsternisse.

The solar eclipse mentioned by Luke on the day of the crucifixion does not help to settle the question either.

Scholars have searched for solutions to each of these problems. However, the matter is extremely complicated and no reliable conclusions can be arrived at. Solutions have been provided that seem to be reconcilable with Jesus' birth in 7 or 6 BCE, whereas other solutions support a birth of Jesus in the year 3 or 2 BCE. As long as no new written or archaeological evidence comes up, a further discussion of these problems is not likely to lead to firm conclusions. In this author's view, the fact that not even one of the historical clues given by the Gospels leads to an unequivocal solution, raises fundamental doubts about their reliability. It appears that the authors of the four Gospels themselves were not sure anymore about the exact time and historical circumstances of the events they describe.

Opinions of Early Christian Authors

Clement of Alexandria

If the Christian year numbering system were correct, then Jesus' birth would have taken place on 25 December of either the year 1 BCE or 1 CE. However, this system was introduced only in 525 CE, by the Roman monk Dionysius Exiguus. Earlier Christian authors dated the birth of Christ on various dates between 4 BCE and 1 CE, and the great majority of them into the years 3 and 2 BCE.³⁶ Clement of Alexandria (150-215 n. Chr.) reports³⁷ that some were of the opinion that Jesus was born on 20 May 2 BCE³⁸, whereas others believed that his birthday was the 19 or 20 April³⁹. Clement himself did not believe in any of these dates. As will be shown, he considers all of them mere speculation and unreliable.

At closer inspection, the history of the dating of the birth and the origin of the Christmas festival turn out to be very complicated. It cannot be the aim of this investigation to treat this matter comprehensively. The following chapters will focus on the opinions of a few early Christian authors, and in particular on the arguments they used to support their views. It will be found that, other than the interpretation of Biblical texts, speculations about the astronomical and agricultural year played an important part. It was believed that the conception, birth, baptism, and death of Christ should have fallen on cardinal points of the astronomical year, namely, on solstices and equinoxes. Also, the Passover of the Jewish luni-solar calendar, which was celebrated near the spring equinox, was considered such a cardinal point of the year. At the same time, it was a cardinal point of the agricultural year and linked to the symbolism of sowing and harvesting. It is obvious that these seasonal festivals are a heritage of ancient astral mythology, ritual calendars and mysteries that were bound to the seasons and the agricultural year. Christians did not do away with this heritage but incorporated it into their doctrines. Jesus had to be born on an important day of the year, because the sympathy or harmony of heaven and earth required it, or because the earth was considered an image of the divine, be it a Platonic idea or the creation plan of God.

Let us first study the considerations of Church Father Clement of Alexandria. They are found in his work *Stromateis* I,XXI, 145,1-146,4:

³⁶ Clement of Alexandria, Tertullian, Origenes, Hippolytus of Rome, Hippolytus of Thebes, Eusebius, and Epiphanius.

³⁷ Stromateis, 1.21.145; e.g. under www.ccel.org/ccel/schaff/anf02.vi.iv.i.xxi.html .

 $^{^{38}}$ 25th Pachon of the 28th year of Augustus.

³⁹ 24th or 25th Pharmuthi.

εἰγεννήθη δὲ ὁ κύριος ἡμῶν τῷ ὀγδόῷ καὶ εἰκοστῷ ἔτει, ὅτε πρῶτον ἐκέλευσαν ἀπογραφὰς γενέσθαι ἐπὶ Αὐγούστου.

(145,1) Our Lord was born in the 28^{th} year, when censuses were commanded to take place for the first time under Augustus.

Some experts date the 28th year of Augustus to 4/3 BCE, others to 3/2 BCE.⁴⁰ Nothing is known about a census in this year, as has been said already. Clement here relies on the correctness of the information given in Luke 2:1f.:

b) ὅτι δὲ τοῦτ' ἀληθές ἐστιν, ἐν τῷ εὐαγγελίῳ τῷ κατὰ Λουκᾶν γέγραπται οὕτως:
 (2) That this is true, is written in the Gospel according to Luke, as follows:

Thus, what follows is intended as a proof of statement a).

 ετει δὲ πεντεκαιδεκάτῷ ἐπὶ Τιβερίου Καίσαρος ἐγένετο ῥῆμα κυρίου ἐπὶ Ἰωάννην τὸν Ζαχαρίου υἰόν.

"In the 15^{th} year under Emperor Tiberius, the speech of the Lord to John, the son of Zechariah, took place." (Luke 3:1-2)

d) καὶ πάλιν ἐν τῷ αὐτῷ· ἦν δὲ Ἰησοῦς ἐρχόμενος ἐπὶ τὸ βάπτισμα ὡς ἐτῶν λ΄.
 And again, in the same [gospel]: "When Jesus came to the baptism, he was of about 30 years. (Luke 3:23)

The 15th year of Tiberius lasted from 19 August 28 CE until 18 August 29 CE. In that year, John the Baptist began to preach, and Jesus had himself baptised by him. At that time, Jesus was "about 30 years old". How does Clemens interpret the expression "about 30 years old". The subsequent text shows that in his opinion, Jesus had completed only 30 years when he was crucified. However, at the same time, he had already taught for a whole year. It follows that Jesus was not 30 yet at the time he was baptised. At least, this was Clement's view.

 καὶ ὅτι ἐνιαυτὸν μόνον ἔδει αὐτὸν κηρῦξαι, καὶ τοῦτο γέγραπται οὕτως· ἐνιαυτὸν δεκτὸν κυρίου κηρῦξαι ἀπέστειλέν με. τοῦτο καὶ ὁ προφήτης εἶπεν καὶ τὸ εὐαγγέλιον.

(3) And that he (Jesus) had to announce for a year only, this is also written, as follows: "To announce a favourable year of the Lord, he sent me." Both the prophet and the gospel said this. (Luke 4:18f.; Isaiah 61:1f.)

 f) πεντεκαίδεκα οὖν ἕτη Τιβερίου καὶ πεντεκαἰδεκα Αὐγούστου, οὕτω πληροῦται τὰ τριάκοντα ἔτη ἕως οὖ ἔπαθεν.

(4) Thus 15 years of Tiberius and 15 of Augustus: like this, the 30 years are completed until <the time> when he suffered.

Thus, in Clement's view, Jesus was baptised in the 15th year of Tiberius, and crucified after the completion of the 15th year of Tiberius and after the completion of his own 30th year of age. However, since he allegedly taught for one whole year, the crucifixion would have taken place in the 16th year of Tiberius. The 16th year lasted from August 29 CE until August 30 CE.

⁴⁰ Förster, *Die Feier der Geburt Christi in der Alten Kirche*, pp. 14f. and footnote 13.

These conclusions are in agreement with one of the two years that are generally assumed for the crucifixion, namely 7 April 30 CE. If Jesus had been exactly 30 years old on that date, then he would have been born in the year 1 BCE⁴¹. However, if he also lived 15 full years under Augustus, who died on 19 August 14 CE, then he must have been born in the year 2 BCE. On the day of the crucifixion, he then was a bit older than 30, but had not necessarily reached his 31st birthday yet.⁴² With regard to Clement's statement a), the 28th year of Augustus would have to be correlated with the year 2 BCE, and the duration of the Augustus' reign assumed as 43 years.

- g) ἀφ' οὖ δὲ ἔπαθεν ἕως τῆς καταστροφῆς Ἱερουσαλὴμ γίνονται ἔτη μβ΄ μῆνες γ΄,
 (5) From <the time> he suffered until the fall of Jerusalem, 42 years and 3 months result,
- h) καὶ ἀπὸ τῆς καταστροφῆς Ἱερουσαλὴμ ἕως Κομόδου τελευτῆς ἔτη ρκβ΄ μῆνες ι΄ ἡμέραι ιγ΄.
 and from the fall of Jerusalem until the death of Commodus, 122 years, 10 months, 13 days.

Unfortunately, statement g) is in conflict with the conclusions drawn above. Jerusalem fell in summer 70 CE, from which it would follow that Jesus was crucified in the year 28 CE. However, this date falls into the 14th, not the 15th, year of Tiberius. If Jesus had been 30 years old in that year, he would have been born in the year 4 or 3 BCE.⁴³

Statement h) can be explained as follows: The death of Commodus is dated to 31 December 192 CE. If 122 years, 10 months, 13 days are subtracted, one arrives at 18 February 70 CE as the date of the fall of Jerusalem. Here, the year is correct, but Jerusalem fell only a few months later, in same year.

i) γίνοναι οὖν ἀφ' οὖ ὁ κύριος ἐγεννήθη ἕως Κομόδου τελευτῆς τὰ πάντα ἔτη ροδ΄ μὴν εἶς ἡμέραι ιγ΄.

Thus, from the birth of the Lord until the death of Commodus there are a total of 194 years, 1 month und 13 days.

How does Clement arrive at these numbers? Apparently he adds up the 122 years, 10 months, 13 years (h) plus 42 years, 3 months (g) plus the 30 years of life of Jesus. However, it seems that he is in error by one year, because the true result of the calculation is *195* years, 1 month and 13 days.

From this statement, some scholars calculated that Clement dated the birth of Jesus to 18 November 3 BCE. Others did the calculation according to the Egyptian calendar without leap years and in this way arrived at 6 January, which is strikingly reminiscent of the feast of Epiphany.

 $^{43}28 - 30 = -2 = 3$ BCE.

 $^{^{41}}$ 30 – 30 = 0 = 1 BCE.

⁴² The crucifixion would have fallen on his 31^{st} birthday if Jesus had been born on 7 April 2 BCE (30 - 31 = -1 = 2 BCE).

In reality, Clement does not have the intention to calculate the birthday of Jesus, and he even *explicitly says that in his opinion such attempts are* "overzealous":

j) είσὶ δὲ οἱ περιεργότερον τῆ γενέσει τοῦ σωτῆρος ἡμῶν οὐ μόνον τὸ ἔτος, ἀλλὰ καὶ τὴν ἡμέραν προστιθέντες, ἥν φασιν ἔτους κη΄ Αὐγούστου ἐν πέμπτῃ Παχὼν καὶ εἰκάδι.

(6) There are also those who for the birth of our Saviour overzealously <indicate> not only the year, but also add the day, which they assert on the 25th of Pachon of the 28th year of Augustus.

The 25th of Pachon in the Egyptian calendar corresponds to 20 May 2 BCE.⁴⁴ However, Clement considers such datings with day-accuracy as "overzealous" ($\pi\epsilon\rho\iota\epsilon\rho\gamma$ óτερον). With his own calculation, he obviously only intends to find the *year* of the birth of Christ, not the day. Even common sense would not assume that statement f), according to which Jesus became 30 years old, and statement g), according to which Jerusalem fell 42 years and 3 months after the crucifixion, have to be taken with *day-accuracy*.

The birthdate mentioned by the "overzealous" ones, namely 20 May 2 BCE, is not uninteresting. In contrast to other dates that shall be discussed in the next chapters, it does not give the impression of a speculation based on "astral theology" or calendar mysteries. Could it be authentic? However, it is not unimportant to note that Clement considers it irrelevant.

Clement continues reporting calendar dates given by different traditions for Jesus' life:

 k) οἱ δὲ ἀπὸ Βασιλείδου καὶ τοῦ βαπτίσματος αὐτοῦ τὴν ἡμέραν ἑορτάζουσι προδιανυκτερεύοντες ἐν ἀναγνώσει.

(146,1) The followers of Basilides also celebrate the day of his baptism, spending the preceding night with reading.

φασὶ δὲ εἶναι τὸ πεντεκαιδέκατον ἔτος Τιβερίου Καίσαρος τὴν πεντεκαιδεκάτην τοῦ Τυβὶ μηνός, τινὲς δὲ αὖ τὴν ἑνδεκάτην τοῦ αὐτοῦ μηνός.

(2) They say, it was in the 15^{th} year of Emperor Tiberius on the 15^{th} of Tybi; some others, on the 11^{th} of the same month.

The 15th and 11th of Tybi correspond to 10 and 6 January 29 CE.⁴⁵

 τό τε πάθος αὐτοῦ ἀκριβολογούμενοι φέρουσιν οι μέν τινες τῷ ἐκκαιδεκάτῷ ἔτει Τιβερίου Καίσαρος Φαμενώθ κε΄, οι δὲ Φαρμουθὶ κε΄. ἄλλοι δὲ Φαρμουθὶ ιθ΄ πεπονθέναι τὸν σωτῆρα λέγουσιν.

(3) Some date his suffering with exact determination into the 16^{th} year of Emperor Tiberius, on the 25^{th} of Phamenoth, others on the 25^{th} of Pharmuthi. And others say that the Saviour suffered on the 19^{th} of Pharmuthi.

 $^{^{\}rm 44}$ Or possibly also to 15 May, if the old calendar is used, which did not have any leap years.

⁴⁵ If the dates were intended in the Egyptian "wandering year" (without leap years), the corresponding dates in the Julian calendar would be 28 and 24 December 28 CE.

The dates correspond to 21 March, 20 April, and 14 April. Now, the crucifixion must have fallen near a full moon because it took place just before Passover. The first two dates fell on a full moon in the year 26 CE, however on Thursday and Saturday; the last one in the year 32 CE, however on a Monday, whereas Jesus was crucified on a Friday. If the dates are taken in the Egyptian "wandering year", i.e. in the calendar without leap years, then the 25th of Pharmuthi corresponds to 7 April. As has been seen, 7 April 30 CE is one of the two most likely crucifixion dates.

Clement continues:

- m) vai μήν τινες αὐτῶν φασι Φαρμουθὶ γεγενῆσθαι κδ΄ ἢ κε΄.
 - (4) Some of them even say that he was born on a 24th or 25th of Pharmuthi.

Thus, the 25th of Pharmuthi was considered both the date of crucifixion and the birthday of Jesus. This can probably be explained from the fact that from the statements d) and e) in Clement's text, the conclusion was drawn that Jesus was exactly 30 years old when he was baptised and exactly 31 years old when he was crucified. Here, the fundamental assumption of ancient calendar speculation and calendar mysteries may have played an important part: the life of Jesus had to accomplish itself in perfect harmony with the cosmic cycles. It thus seems that birth dates of Jesus in March or April, which are close to the spring equinox or Passover, are based on speculation and historically are not very credible.

The above considerations on Clement's text can be summarised as follows: In his attempt to determine the birth year of Jesus, Clement almost exclusively relies on statements he finds in the Gospel of Luke and thereby arrives at the 28th year of August, or the year 3/2 BCE. The other data he provides, like the time distance between the crucifixion, the fall of Jerusalem, and the death of Commodus, do not really contain any additional information about the birth of Jesus. It thus seems that the only sources that were available to Clement for dating of the birth of Jesus were Biblical, and he did not have any useful extra-Biblical sources. Clement was of the opinion that it was impossible to determine the exact birth date of Jesus. However, Clement reports that some early authors dated the birth of Jesus into March or April, thus probably on a Passover date and assuming that he was crucified or resurrected on his birthday. Clement also notes that according to some, Jesus was born on the 25th of Pachon in the 28th year of Augustus, i.e. on 20 May 2 BCE. Unfortunately, Clement does not say anything about the background of this date, e.g. its origin or theological reasoning behind it. However, it is important to see that Clement is not aware of any alleged birth date of Jesus that appears in later authors, such as 25 December or 6 January. There is not even evidence that Christians of the time of Clement celebrated the birthday of Jesus. Clement certainly did not.

De Pascha computus and Hippolytus of Rome

Another interesting early text that mentions a birth date of Jesus is titled *De Pascha computus*. It is traditionally ascribed to Cyprian of Carthage, but actually stems from a different author, whose name is unknown and who therefore is called Pseudo-Cyprian. The text dates itself into the 5^{th} year of Emperor Gordianus III, thus to the year 243 CE. Like Clement of Alexandria, this text knows neither Christmas nor Epiphany. Instead, it believes that the birth of Jesus took place on a Wednesday, 28 March and a Passover. However, this date does not go back to a real historical transmission, rather it results from a number of Bible verses, combined with astro-theological speculation.

The author sets out from the creation myth of Genesis 1, where God creates Heaven and Earth, divides light and darkness, and thereby creates the first day and night. From this, he draws the conclusion that the creation of the world started on a spring equinox, on a 25 March in the Julian calendar.⁴⁶ This may be speculative, but it is at least in agreement with the Jewish calendar, where the ecclesiastical year began in the month of Nisan, the month of the spring equinox. On the fourth day, i.e. on a Wednesday, 28 March, the Sun and the Moon were created, and together with them also the months and the years.⁴⁷ In the subsequent chapters, Pseudo-Cyprian explains the 112-year Easter cycle, and then calculates the dates of Jesus' birth and crucifixion, based on considerations which need not be discussed here. He finds that the birth of Jesus, like the creation of the Sun, must have fallen on a Wednesday, 28 March, in agreement with the fact that the Old Testament calls the Messiah "the Sun of Righteousness" (Malachi 3:20 = 4:2). In delight, the author exclaims:

O quam praeclara et divina Domini providentia, ut in illo die quo factus est sol in ipso die nasceretur Christus V kl. Apr. feria IIII. et ideo de ipso merito ad plebem dicebat Malachias propheta: "orietur vobis sol iustitiae, et curatio est in pennis eius." hic est sol iustitiae cuius in pennis curatio praeostendebatur.

O how clear and divine is the providence of the Lord, so that on the same day on which the Sun was created, on the same day also Christ was born, on a Wednesday, 28 March. And that is why the Prophet Malachi meritoriously said to the people: "The Sun of Righteousness will rise for you, and healing is in His wings." He (namely Christ) is the Sun of Righteousness, in whose wings healing is prefigured.⁴⁸

⁴⁶ De Pascha computus, chap. 3 and 4. (in: Patrologia Latina PL 4,957-974)

⁴⁷ op. cit., chap. 5.

⁴⁸ op. cit., chap. 19.

Pseudo-Cyprian then dates the Last Supper 31 years later, to Thursday, 18 April in the 16th year of Tiberius.⁴⁹ Thus, both the birthday and the cruci-fixion fall on a Passover.

It is obvious that all this is pure speculation. The author is obsessed with the idea that the creation of the Sun as well as the birth of Jesus and his crucifixion all must have fallen on a Passover, and he is convinced that this is the way divine providence expresses itself.

Incidentally, the calculation is wrong. The 16th year of Tiberius would actually correspond to the year 30 CE. However, 8 April of that year was not a Thursday, but a Saturday. And Jesus' birth 31 years earlier, on 28 March 2 BCE, would not have fallen on a Wednesday, but on a Friday. The lunar phases are wrong, too. In both cases, the Moon is not full, but has been waning already for several days. It must be added, however, that the calculation was already based on a wrong dating of the 16th year of Tiberius and the crucifixion. On the one hand, the text dates itself into the 5th year of Emperor Gordianus III, and on the other hand 215 (var. 220) years after crucifixion. Using the latter statement, the crucifixion and the 16th year of Tiberius would fall into the year 28 CE (or 23 CE, using the variant). The birth of Jesus would then fall into 4 BCE (or 9 BCE, using the variant). From this point of view, the weekdays given by Pseudo-Cyprian would be correct, but the lunar phases would still be wrong.

The text *De Pascha computus* understands itself as an improvement of the work of Hippolytus of Rome (170 - 235 CE), who had also tried to calculate the history of creation until the crucifixion, and who had also created his own Easter cycle. He dates Jesus on Wednesday, 2 April 2 BCE⁵⁰ and the crucifixion on Friday, 25 March 29 CE, giving Jesus only 30, not 31, years of age. Here, the weekdays are correct, but the lunar phases are wrong again.

⁴⁹ A text variant has 24 March. However, if the birth of Jesus took place 31 years earlier on a 28th March and a Passover, then one arrives at 8 April for the Last Supper, using the Easter cycle of the text.

⁵⁰ This date results firstly from Hippolytus' Easter table and secondly from a version of his commentary on Daniel 4:23. The other version of this text, which is often quoted, mentions 25 December. However, this must be a later "correction" of the text. The problem is discussed by Hans Förster in: *Die Feier der Geburt Christi in der Alten Kirche*, pp. 44-53.

Epiphanius of Salamis and Ephrem the Syrian

In the 4th century, the first testimonies appear of a birth festival of Jesus on 6 January. The celebration on this date became very wide-spread in the orient. However, still in the same century, and within only a few decades, it was replaced by the Christmas feast, which was celebrated on 25 December in Rome. Only the Armenian Apostolic Church kept 6 January as Jesus' birth-day until today, whereas all other churches now consider the same date as the day of the arrival of the "Three Holy Kings" or "Wise Men from the East".

Incidentally, the fact that Orthodox churches celebrate the birth of Jesus on 7 January, beginning the festivities in the evening of the 6 January, does not mean that they still celebrate the older festival. The date of the orthodox festival results from the fact that they celebrate Christmas according to the old *Julian* calendar, where 25 December currently corresponds to Gregorian 7 January. The two calendars shift against each other by 3 days in 400 years. In other words, eastern churches do celebrate the birth of Jesus on 25 December, however not according to the Gregorian, but according to the Julian calendar. In the fourth century, however, there was a birth celebration of Jesus on 6 January according to the *Julian* calendar. As has been stated, this date has survived only in the Armenian Church, however is mostly celebrated according to the Gregorian calendar. Only in Tiflis and Jerusalem, Armenians celebrate the birth of Jesus according to the Julian calendar, thus on Gregorian 19 January.

For the considerations that follow, it is also important to know that the birth festivities already began on the previous evening. This is the case even until this day. Although, 25 December is considered the birthday of Christ, the celebration begins on "Christmas Eve", i.e. on the 24th after sunset. The reason is that in the Jewish calendar, the new day did not begin at midnight, but already at sunset of the previous day. Thus in the calendar of the church, 25 December actually begins at sunset on 24 December and lasts until the sunset on the 25th. However, where the birth of Jesus was assumed on 6 January, the celebrations began in the evening of 5 January.

The most important ancient source concerning the introduction of this festival is the work "Against the Heresies" (*Adversus haereses*) by Epiphanius of Salamis (315 - 403 CE), who was bishop of Cyprus, but stemmed from Palestine. He writes:

Γεννηθέντος γὰρ αὐτοῦ ἐν τῷ Ἰανουαρίῷ μηνὶ τουτέστιν πρὸ ὀκτὼ εἰδῶν Ἰανουαρίων – ἥτις ἐστὶ κατὰ Ῥωμαίους πέμπτη Ἰανουαρίου ἑσπέρα εἰς ἕκτην ἐπιφώσκουσα, ... κατὰ Σύρους εἴτ' οὖν Ἔλληνας Αὐδυναίου ἕκτη, ... κατὰ Παφίους Ἰουλίου τεσσαρεσκαιδεκάτη, κατὰ Ἄραβας Ἀλεὼμ μία καὶ εἰκάς, κατὰ Καππάδοκας Ἀταρτᾶ τρισκαιδεκάτη ...

For, he was born in the month of January, on the 8th before the Ides, which, according to the Romans, corresponds to the evening of the 5th of January, which precedes the morning of the 6th; according to the Syrians and the

Greeks on the 6^{th} of Audynaios, ... according to the Paphians on the 14 of July, according to the Arabs on the 21^{st} of Aleom, according to the Cappadocians on the 13^{th} of Atartes.⁵¹

Epiphanius calls 6 January "the day of his birth, i.e. of [his] manifestation/ appearance/epiphany" (τῆς τῶν γενεθλίων αὐτοῦ ἡμέρας τουτέστιν Ἐπιφανείων).⁵² He firstly believed that Jesus was born on this day; secondly, that two years later on the same day, the magi came to see Jesus; and thirdly, that on the same day also the Marriage at Cana took place, where Jesus turned water into wine.

Strictly speaking, Epiphanius dates the birth of Jesus to the evening preceding the 11th of Tybi in the 42nd year of Augustus, if reckoned from the latter's first consulship in 43 BCE, and in the 29th year after the annexation of Judaea by Augustus. This corresponds to the evening of 5 January 2 BCE.⁵³ However, in another place, Epiphanius asserts that Jesus was born in the 33rd year of Herod, that the magi arrived in his 35th year, and Herod died in his 37th year.⁵⁴ He thus believes that Jesus was born four years before Herod's death. As has been shown already, Herod's demise is usually assumed in 4 BCE, although some believe that he died only in 1 BCE.⁵⁵ Thus, Jesus would have been born either in 8 BCE or in 5 BCE.

However, 6 January is not a credible birthdate of Jesus either. Epiphanius does not provide any proof from the Bible, he just follows his tradition and justifies it using some rather doubtful quotation from a Roman history work:

(3) Γεννᾶται μὲν γὰρ ὁ σωτὴρ τεσσαρακοστῷ δευτέρῳ ἔτει Αὐγούστου βασιλέως τῶν Ῥωμαίων ἐν ὑπατεία τοῦ αὐτοῦ Ἐκταυίου Αὐγούστου τὸ τρισκαιδέκατον καὶ Σιλανοῦ, ὡς ἔχει τὰ παρὰ Ῥωμαίοις ὑπατάρια. (4) κεῖται γὰρ ἐν αὐτοῖς οὕτως· «τούτων ὑπατευόντων», φημὶ δὲ Ἐκταυίου τὸ τρισκαιδέκατον καὶ Σιλανοῦ, «ἐγεννήθη Χριστὸς τῆ πρὸ ὀκτὼ εἰδῶν Ἱανουαρίων» μετὰ δεκατρεῖς ἡμέρας τῆς χειμερινῆς τροπῆς καὶ τῆς τοῦ φωτὸς καὶ ἡμέρας προσθήκης. (5) ταύτην δὲ τὴν ἡμέραν ἑορτάζουσιν Ἐλληνες, φημὶ δὲ οἱ εἰδωλολάτραι, τῆ πρὸ ὀκτὼ καλανδῶν Ἱανουαρίων, τῆ παρὰ Ῥωμαίοις καλουμένῃ Σατουρνάλια, παρ' Αἰγυπτίοις δὲ Κρόνια, παρὰ Ἀλεξανδρεῦσι δὲ Κικέλλια.

(3) The Saviour was born in the 42^{nd} year of Augustus, the king of the Romans, under the 13^{th} consulship of the same Octavius Augustus and Silanus, as the Ro-

⁵¹ Epiphanius, Adversus Haereses (Panarion) 51,24,1.

⁵² Epiphanius, Adversus Haereses (Panarion) 51,27,4.

⁵³ Epiphanius, Adversus Haereses (Panarion) 51,22,3; 19.

⁵⁴ Epiphanius, *Adversus Haereses (Panarion)* 51,10,1. From Herod's Massacre of the Innocents, which hit all boys younger than two years, Epiphanius concludes that the magi arrived only two years after the birth of Jesus and after the appearance of his star. In order to reconcile this theory with the account of Matthew, he has the holy family travel a second time from Nazareth to Bethlehem. After that they fled to Egypt and lived in exile for two years until the death of Herod.

⁵⁵ Cf. this author's explanations on pp. 13ff.
man lists of consuls have it. (4) For, it is laid down as follows in them: "while these were consuls", I mean Octavius his 13^{th} time and Silanus, "*Christ was born on the 8th before the Ides of January*" (= 6 January 2 BCE), 13 days after the winter solstice and the increase of light and day. (5) The Greeks, I mean the idolaters, celebrate this day (namely the solstice) on the 8th before the Calends of January (= 25 December), which amongst the Romans is called "Saturnalia", amongst the Egyptians "Cronia", and amongst the Alexandrians "Cicelia".⁵⁶

The pagan festivals mentioned by Epiphanius will be treated shortly. The list of consuls he quotes is preserved in Latin in the so-called *Consularia Constantinopolitana*.⁵⁷ However, according to this list, Jesus was not born on 6 January (on the 8th before the Ides), but on 25 December (on the 8th before the Calends). Since Epiphanius apparently does not know of this alternative birthday, it seems that the version used by Epiphanius indeed mentioned 6 January. Still, the source is not credible. Neither can this date be supported using statements of the Bible, nor are there other, earlier, testimonies of a birth of Jesus on that day. Furthermore, it has been shown that even earlier authors could only speculate about the birthday of Jesus and arrived at completely different solutions.

Apart from this "historical" source, Epiphanius provides some considerations based on calendrical speculation that were intended to support 6 January as the birthday of Christ. After the above-quoted lines, he continues as follows:

(6) τῆ γὰρ πρὸ ὀκτὼ καλανδῶν Ἰανουαρίων τοῦτο τὸ τμῆμα γίνεται, ὅ ἐστι τροπή, καὶ ἄρχεται αὕξειν ἡ ἡμέρα τοῦ φωτὸς λαμβάνοντος τὴν προσθήκην, πληροῖ δὲ δεκατριῶν ἡμερῶν ἀριθμὸν εἰς τὴν πρὸ ὀκτὼ εἰδῶν Ἰανουαρίων, ἕως ἡμέρας τῆς τοῦ Χριστοῦ γεννήσεως προστιθεμένου τριακοστοῦ ὅρας ἐκάστῃ ἡμέρα.

(6) For, on the 8th before the Calends of January (= 25 December, DK) this "cut" ($\tau\mu\eta\mu\alpha$) takes place, which is the solstice, and the day starts to increase because the light (and not anymore the darkness) receives increasing. And it (what? the "cut"? the solstice? the light? DK) completes the number of 13 days until the 8th before the Ides of January (= 6 January DK), [i.e.] until the day of the birth of the Christ, a thirtieth of an hour being added to each day.

(7) ὡς καὶ ὁ παρὰ τοῖς Σύροις σοφὸς Ἐφραῒμ ἐμαρτύρησε τοὐτῷ τῷ λόγῷ ἐν ταῖς αὐτοῦ ἐξηγήσεσι λέγων ὅτι «οὕτως γὰρ ῷκονομήθη ἡ τοῦ κυρίου ἡμῶν Ἰησοῦ Χριστοῦ παρουσία, ἡ κατὰ σάρκα γέννησις εἴτ' οὖν τελεία ἐνανθρώπησις, ὃ καλεῖται Ἐπιφάνεια, ἀπὸ τῆς ἀρχῆς τῆς τοῦ φωτὸς αὐξήσεως ἐπὶ δέκα τριῶν ἡμερῶν διαστήματι' ἐχρῆν γὰρ καὶ τοῦτο τύπον γενέσθαι ἀριθμοῦ τοῦ αὐτοῦ κυρίου ἡμῶν Ἰησοῦ Χριστοῦ καὶ τῶν αὐτοῦ δώδεκα μαθητῶν, ὃς <τὸν> τῶν δεκατριῶν ἡμερῶν τῆς τοῦ φωτὸς αὐξήσεως ἐπλήρου ἀριθμόν».

⁵⁶ Epiphanius, Adversus Haereses (Panarion) 51,22,3-5.

⁵⁷ "752. Octaviano XIII et Silano. / 1. His conss. natus est Christus die VIII cal. Ian." ("Consularia Constantinopolitana", in: *Monumenta Germaniae historica. Auctorum antiquissimorum tomus IX*, vol. I, p. 218)

(7) The Syrian wise Ephrem also testified to this calculation in his interpretations ("exegeses"), saying: "In such a way was established the arrival of our Lord Jesus Christ, the birth after the flesh or the accomplished incarnation (lit. "in-humanisation"), which is called the "manifestation/appearance" (epiphany), in a time distance of 13 days from the beginning of the increase of light. For, this also had to be a symbol (*typos*) of the number of our Lord Jesus himself and his twelve disciples, because he (as the thirteenth) completed the number of the 13 days of the increase of the light."⁵⁸

Epiphanius assumed the winter solstice on 24/25 December according to the Julian calendar then in use. Strictly speaking, the solstice had taken place on this date only in the 1st century BCE. By the 4th century CE, the time of Epiphanius, the solstice had moved to 20 December. This shift is explained by the inaccuracy of the Julian calendar. Nevertheless, in the ecclesiastical year and the religious traditions of ancient Sun gods, 25 December was considered to be the solstice date even in Epiphanius' time and later. This can also be seen from texts quoted below. Incidentally, the shift further increased over the subsequent centuries. Around 1582, when the Gregorian calendar was introduced, the Julian solstice occurred on 4 January.

Thus, Epiphanius links the birth date of Jesus to the winter solstice date; however, he believes him to have been born 13 days later. The difference of 13 days is interpreted by him as a *typos* or "symbol" of Jesus and his 12 disciples. In Epiphanius' view, this is apparently a further confirmation of the birth of Jesus on 6 January.

It has been supposed by historians that the establishment of the birth festival in the first line served the purpose of repressing and replacing pagan rites that were performed on the same date. However, this explanation is not supported by sources. Furthermore, this supposition does not do justice to the way of thinking of the Church Fathers, who interpreted this repression of pagan rites in a completely different way. Epiphanius is convinced not only of the historical correctness of this date, but also of the validity of the abovequoted calendar-based mystic speculation. A cosmic event as important as the birth of the Christ *could only* have taken place on a particular day of the year that had a symbolic connection with it. The parallels between pagan and Christian rites are interpreted as a result of the fact that even the pagans "recognise a part of the truth". Nay, *in Epiphanius' opinion, these pagan cults are actually another proof of the correctness of this birthdate of Jesus*. In the continuation of the text quoted above, he writes:

⁵⁸ Epiphanius, *Adversus Haereses (Panarion)* 51,22,6-7. The text of Ephrem referred to is otherwise not preserved.

(8) πόσα τε άλλα εἰς τὴν τούτου τοῦ λόγου ὑπόθεσίν τε καὶ μαρτυρίαν, φημὶ δὲ τῆς τοῦ Χριστοῦ γεννήσεως, γέγονέν τε καὶ γίνεται. καὶ γὰρ καὶ μέρος τι τῆς ἀληθείας ἀναγκαζόμενοι ὁμολογεῖν οἱ τῆς τῶν εἰδώλων θρῃσκείας ἀρχηγέται καὶ ἀπατηλοὶ εἰς τὸ ἐξαπατῆσαι τοὺς πεισθέντας αὐτοῖς εἰδωλολάτρας ἐν πολλοῖς τόποις ἑορτὴν μεγίστην ἄγουσιν ἐν αὐτῆ τῆ νυκτὶ τῶν Ἐπιφανείων, εἰς τὸ ἐπὶ τῆ πλάνῃ ἐλπίσαντας μὴ ζητεῖν τὴν ἀλήθειαν.

(8) And how many other [things] occurred and [still] occur as a support and testimony of this calculation, namely of the birth of Christ! For, even the leaders of the worship of idols are forced to agree with some part of the truth; and in deceitful intention, in order to deceive the idolaters who believe them, they perform a very great festival in many places in the very night of Epiphany, hoping that the latter, as a result of their confusion, will not search for the truth.

(9) πρῶτον μὲν ἐν Ἀλεξανδρεία ἐν τῷ Κορείφ <ού>τω καλουμένφ· ναὸς δέ ἐστι μέγιστος τουτέστιν τὸ τέμενος τῆς Κόρης. ὅλην γὰρ τὴν νύκτα ἀγρυπνήσαντες ἐν ἄσμασί τισι καὶ αὐλοῖς τῷ εἰδώλῷ ἄδοντες καὶ παννυχίδα διατελέσαντες μετὰ τὴν τῶν ἀλεκτρυόνων κλαγγὴν κατέρχονται λαμπαδηφόροι εἰς σηκόν τινα ὑπόγαιον (10) καὶ ἀναφέρουσι ξόανόν τι ξύλινον <ἐν> φορείφ καθεζόμενον γυμνόν, ἔχον σφραγῖδά τινα σταυροῦ ἐπὶ τοῦ μετώπου διάχρυσον καὶ ἐπὶ ταῖς ἑκατέραις χερσὶν ἄλλας δύο τοιαύτας σφραγῖδας καὶ ἐπ' αὐτοῖς τοῖς δυσὶ γονάτοις ἄλλας δύο, ὁμοῦ δὲ [τὰς] πέντε σφραγῖδας ἀπὸ χρυσοῦ τετυπωμένας, καὶ περιφέρουσιν αὐτὸ τὸ ξόανον ἑπτάκις κυκλώσαντες τὸν μεσαίτατον ναὸν μετὰ αὐλῶν καὶ τυμπάνων καὶ ὕμνων καὶ κωμάσαντες καταφέρουσιν αὐτὸ αὖθις εἰς τὸν ὑπόγαιον τόπον.

(9) Firstly, in Alexandria, in the so-called Koreion: This is a very great temple, namely the sanctuary of Kore. The whole night over they stay awake and sing for the idol with some songs and flutes. And at the end of the night celebration, at the crow of the cocks, torch-bearers descend into a subterranean sanctuary (10) and carry up some wooden idol that is seated naked on a sedan chair. It has some gilded seal sign of a cross on its forehead, and two more such seal signs on both hands, and another two exactly on both knees, altogether five seal signs that are imprinted in gold. And they carry the idol seven times in a circle around the inmost temple, with flutes and tambourines and hymns, celebrate it, and carry it back down to its subterranean place.

ἐρωτώμενοι δὲ ὅτι τί ἐστι τοῦτο τὸ μυστήριον ἀποκρίνονται καὶ λέγουσιν ὅτι ταὑτῃ τῇ ὥρᾳ σήμερον ἡ Κόρῃ (τουτέστιν ἡ παρθένος) ἐγέννῃσε τὸν Aἰῶνα. However, when they are asked what kind of mystery this is, they answer and say that *today in this hour, Kore, i.e. the Virgin, gave birth to the Aion.*

(11) τοῦτο δὲ καὶ ἐν Πέτρα τῃ πόλει (μητρόπολις δέ ἐστι τῆς Ἀραβίας, ἥτις ἐστὶν Ἐδὼμ ἡ ἐν ταῖς γραφαῖς γεγραμμένη) ἐν τῷ ἐκεῖσε εἰδωλείῳ οὕτως γίνεται, καὶ Ἀραβικῃ διαλέκτῷ ἐξυμνοῦσι τὴν παρθένον, καλοῦντες αὐτὴν Ἀραβιστὶ Χααβοῦ τουτέστιν Κόρην εἴτ' οὖν παρθένον καὶ τὸν ἐξ αὐτῆς γεγεννημένον Δουσάρην τουτέστιν μονογενῆ τοῦ δεσπότου. τοῦτο δὲ καὶ ἐν Ἐλούσῃ γίνεται τῃ πόλει κατ' ἐκείνην τὴν νύκτα, ὡς ἐκεῖ ἐν τῃ Πέτρα καὶ ἐν Ἀλεξανδρεία.

(11) And this also happens like this in the city of Petra ... in the local idol temple, and they praise the Virgin in the Arabic language, calling her in

Arabic Khaabu⁵⁹, that is Kore or "virgin"; and the one who is given birth [they call] Dusares⁶⁰, that is "the only-begotten of the Lord". And this also happens in the city of Elusa during that night, in the same way as there in Petra and in Alexandria.⁶¹

There are more parallels between Epiphany and ancient pagan festivals. The Roman Imperial cult also knew epiphany festivals, which took place in the first days of January and were dedicated to the "appearance" of the divine emperor. The German *Wikipedia* states:

In the ancient roman Imperial cult in the Hellenistic east of the Roman empire, a holiday formed whose ceremonies were partly dedicated to the divine appearance of the Divus[3]. The rite was also celebrated in the beginning of January[4] and was based on the epiphany of Julius Caesar, who, while crossing the Rubicon on 10 January 49 BCE, was greeted and adored by the people as Saviour and living god (probably Divus Iulius).[5] In principle, Epiphany meant nothing else than the *adventus*, the arrival of the Roman emperor and "his auspicious entering into a city".[6]⁶²

(Greek text and translation added by D.K.:)

έπε[ιδὴ ἡ πάντα] διατάξασα τοῦ βίου ἡμῶν πρόνοια σπουδὴν εἰσεν[ενκαμ]ένη καὶ φιλοτιμίαν τὸ τεληότατον τῷ βίῷ διεκόσμη[σεν] ἐνενκαμένη τὸν Σεβαστόν, ὃν εἰς

⁵⁹ There are the variants Xaa β oũ and Xaa μ oũ. In byzantine manuscripts, the letters β and μ can easily be confused. Arabic *ku 'bun* (کعب) means "breast", *ğāriyatun ka 'ābun* (جارية کعاب) means "virgin" (Lane, *An Arabic-English Lexicon*, part 7, p. 2616).

⁶⁰ From Noiville's explanations, one can draw the conclusion that he interprets the name Dusares as $d\bar{u} \, \bar{s}ar\bar{a} \, (\dot{z} \, \omega \, \omega)$, "who has brilliance (like lightning)", and refers it to the morning star. (Lane, *An Arabic-English Lexicon*, part 4, p. 1544 (*šariya*); Noiville, "Le culte de l'étoile du matin chez les arabes préislamiques et la fête de l'épiphanie", p. 375.)

⁶¹ Epiphanius, Adversus Haereses (Panarion) 51,22,8-11.

⁶² "Im antiken römischen Kaiserkult im hellenistischen Osten des Römischen Reiches formte sich ein Feiertag, der die göttliche Erscheinung des Divus als Teil des Zeremoniells beinhaltete.[3] Der Ritus wurde ebenfalls zu Beginn des Januars gefeiert[4] und basierte auf der Epiphanie Iulius Caesars, der beim Überschreiten des Rubikon am 10. Januar 49 v. Chr. vom Volk als Heiland und lebender Gott (wahrscheinlich Divus Iulius) begrüßt und angebetet wurde.[5] Grundsätzlich bedeutete die Epiphanie nichts anderes als der adventus, die Ankunft des römischen Herrschers und "seinen glückverheißenden Einzug in eine Stadt"[6]."

http://de.wikipedia.org/wiki/Erscheinung_des_Herrn#Geschichte_und_Inhalte, 20th Feb. 2012. The footnotes in the quotation are worth noting, too:

[&]quot;[3] In ancient Roman Imperial metaphysics, another term for the appearance of the lord was *evangelium* (i.e., good news, gospel). E.g., it appears translated like this in a resolution of Greek citizens of the imperial province Asia: (In der antiken römischen Reichsmetaphysik wurde zusätzlich für die Erscheinung des Herrn das Wort Evangelium verwendet, so z. B. wiedergegeben in einem Beschluß der griechischen Bürger der Reichsprovinz Asia:)"

Over time, the Christian Epiphany festival replaced these pagan cults.

What is interesting is that Epiphanius considers the pagan celebrations on 6 January a *confirmation* of Jesus' birth on the same date. The idea of modern scholars that the birth of Jesus was celebrated on this date for the purpose to repress pagan festivals, is probably incorrect. Rather it seems that Christians, when they saw that the pagans celebrated the birth of their god Aion ("eternity") from a virgin on 6 January, they arrived at the conclusion that the pagans in fact must have understood "a part of the truth" (μ έρος τι τῆς ἀληθείας) and, without knowing, actually celebrated the birth of Jesus, "the *true* sun". It thus seems that the Christians *learned* the "true" birthdate of Jesus from the pagans.

Epiphanius also quotes the Syrian saint Ephrem (vide above pp. 37f.), who lived from 306 to 373 CE and preached in Nisibis (Nusaybin) and Edessa (Şanlıurfa) in southeast Anatolia. It therefore seems that Ephrem also was a

εὐεργεσίαν ἀνθρώπων ἐπλήρωσεν ἀρετῆς, [ὥ]σπερ ἡμεῖν καὶ τοῖς μεθ' ἡ[μᾶς σωτῆρα πέμψασα] τὸν παύσοντα μὲν πόλεμον, κοσμήσοντα [δὲ πάντα,

"The providence that arranges everything in our life, in its benevolence and generosity, has in the most perfect way arranged [everything] for [our] life, by bringing [us] the venerable Augustus, whom it filled with virtue to [make him] a benefactor of the people, and like this sent him as a Saviour to us and the ones who are with us, in that he ended the war and arranged everything in order."

φανεὶς δὲ] ὁ Καῖσαρ τὰς ἐλπίδας τῶν προλαβόντων [εὐαγγέλια πάντων ὑπερ]έθηκεν, οὐ μόνον τοὺς πρὸ αὐτοῦ γεγονότ[ας εὐεργέτας ὑπερβα]λόμενος, ἀλλ' οὐδ' ἐν τοῖς ἐσόμενοις ἐλπίδ[α ὑπολιπὼν ὑπερβολῆς,]

"When he appeared, the Emperor overtopped the hopes of all who had received gospels (*evangelia*) beforehand, in that he not only surpassed all the benefactors that had preceded him, but also did not leave over any [unfulfilled] hope amongst those who live currently."

ἦρξεν δὲ τῷ κόσμῳ τῶν δι' αὐτὸν εὐαγγελί[ων ἡ γενέθλιος] τοῦ θεοῦ ...

"The birth of the god (Augustus) initiated for the world the *evangelia* that were [celebrated] because of him..."

(Translation D.K.; sources: Ethelbert Stauffer: *Jerusalem und Rom im Zeitalter Jesu Christi* (Bern 1957); cf. the epiphany and the "evangelical" festival in: Jos. *Bell.* 4, 10, 6, 618. Greek text according to: W. Dittenberger, *Orientis Graeci Inscriptiones Selectae*, vol. II, Nr. 458, pp. 53-55.

[4] "However, not exclusively, since every divinised emperor had his own 'evangelical' festivals and proclamations of epiphany, where his appearance was celebrated." (Jedoch nicht ausschließlich, denn jeder divinisierte Kaiser hatte eigene Evangelienfeste und Epiphanieproklamationen, an denen seine Erscheinung gefeiert wurde.)

[5] "Manfred Clauss: *Kaiser und Gott*. Stuttgart/Leipzig 1999; cf. also the epiphany of Caesar in Corfinium (Caesar: *De Bello Civili*. I.21)."

[6] ""Einleitung" in Schott: *Römisches Messbuch; adventus Caesaris* in Aulus Hirtius: *De Bello Gallico*. (VIII.51)."

follower of the birth celebrations on 6 January. Unfortunately, the Syriac original text of Epiphanius' quotation is not preserved. However, other texts from Ephrem's hand, which are preserved in the original, raise questions. In his sermons about the birth of the Lord he writes:

The sun (or: the light) prevailed and revealed the secret through the degrees he ascended. Behold, it has been twelve days since he ascended and this one today is the thirteenth: The perfect secret of the Son himself and his Twelve (Apostles). Moses scheduled the Easter lamb for the month of Nisan, to wit on the 10th of the same. His (or: its?) secret is that of the Son, who came into the womb and enclosed himself therein on the 10th [of Nisan]. *From the womb he emerged in that month in which the light prevailed*. Defeated was the darkness, in order to indicate that Satan was subdued. And the light prevailed, in order to rejoice at the appearance (or: triumph) of the Firstborn one. Defeated was the darkness with the dark one (i.e. Satan), and our light prevailed with the light of the sun.⁶³

There is talk of the winter solstice and the 13 days that start with it. The 13th day is called the day "of today". If 25 December, which was considered the day of the winter solstice⁶⁴, is taken as the first day, then the 13th day falls on 6 January, the Epiphany festival. Ephrem's text is dedicated to this day. It therefore seems that Epiphanius is right in his assertion that Ephrem celebrated the birth of Jesus on this day.

Nevertheless, there are problems. The victory of the light did not take place on 6 January, but – in the view of the then scholars – already on 25 December. Furthermore, Ephrem says:

لَقِم هم خَاهُم حمُنُه مَاسم الله عمام الله المعالم .

From the womb he emerged in that month in which the light prevailed.

Does this mean that Ephrem assumed the birth of Jesus already in the month of the solstice, thus on 25 *December*, although he celebrated it only 13 days later, on 6 *January*, at the perfection of the mystery that lasts for 13 days?

⁶³ (Benedictus), *Sancti Ephraem Syri opera omnia*, vol. 2, p. 415A-C ("In Natalem Domini Sermones", Sermo 4). Cf. (Lamy), *Sancti Ephraem Syri hymni et sermones*, vol. I, p. 10 (*In festum Epiphaniae* I.11-12).

⁶⁴ Strictly speaking, this was only correct in the Julian calendar and in the 1st cent. BCE.

In another passage, he says:

A hoard of help (or healing) is this day, on which light shone forth above our blindness. ...

In December (*konun*), in which the seed is hidden in the earth, the ear (or: the master) of life sprouted out of the womb.⁶⁵

And a bit later:

حمَّت ، تَى اَنْتُلْمُلْى تَنْبَا لَى مَنْحُمَّى تَلْى مُعْمَلْتُه . حصَّلاه ، تَحَدَّثُ حَالاً مَ مَّلْنَ نَقِم عَمَدَت ، تَصَحِي مَا حَال حَدْمَا ، صَلاه ، تَحَبَّذ لَنَهُ لَى أَحَمَّ حَمَّنَا مَ مَعْ مَاه مُنَا مَه مُنْ مَاه مُنْكَما ، حُتَّى ، تَحْعَلُى مُتَلْدَة بَها ُ حَامَ حُصْ مَه مَهم مُدَا مَا مَا مَا مَا مَا مَا

In December (*konun*), in which the night is long, the day rose for us that never ends.

In winter, in which all creature is gloomy (or: sad), beauty sprouted that made all creatures serene.

In winter, which makes the earth bleak, virginity learned giving birth.

In December (*konun*), which ends the birth throes of the earth, were the throes of virginity. 66

Unfortunately, there are divergent opinions about the exact meaning of the word *konun* (خلق) here, which this author renders as "December" The word could in fact denote either December or January. December is "the first *konun*" (\prec (خلق) and January "the second *konun*" (خلق). In the above-quoted text, some translate *konun* as "December", however, Usener is of the opinion that January in the Julian calendar must be intended.⁶⁷ However, this is impossible, because Ephrem clearly refers to the month of the solstice. Again, the question must be asked: Did he assume the birth of Jesus on the solstice, but still celebrate it only on 6 January, after the mystical number 13 had been completed? The texts quoted above seem to support this conclusion.⁶⁸ Interestingly, Epiphanius maintains a slightly different view, although referring to Ephrem, for he explicitly assumes the birth of Jesus on the 13th day after the winter solstice.

⁶⁵ Sancti Ephraem Syri opera omnia, vol. 2, pp. 406F and 407A ("In Natalem Domini Sermones", Sermo 3).

⁶⁶ ibidem, pp. 410C-D.

⁶⁷ Usener, *Das Weihnachtsfest*, p. 197.

⁶⁸ Cf. also: (Lamy), Sancti Ephraem Syri hymni et sermones, vol. II, pp. 495-498 (Hymni de Nativitate Christi in Carne VI.3f.; 7).

Was Ephrem torn in this question? However that may be, there can be no doubt that in Ephrem's view, the birth of Christ is symbolically linked to the winter solstice. There is only a small step from Ephrem to the traditional Christmas festival, especially as the symbolism of 25 December and the solstice is very convincing, whereas 6 January appears to be a complicated construct.

Jerome and John Chrysostom

The Christmas festival of 25 December was introduced in Rome in the middle of the 4th century at the earliest. An older testimony from Hippolytus' commentary on Daniel 4:23, which was written in 202 CE, is not authentic.⁶⁹ Epiphanius (4th cent.) knew only pagan festivals on 25 December.⁷⁰ Clement (200 CE) knew only birth dates of Jesus in spring.⁷¹ That Jesus was born on a 25 December is very unlikely.

From the texts of Ephrem that have been discussed above, it is easy to understand why Christmas prevailed over Epiphany as a birth festival of Jesus within only a few decades. On the one hand, Epiphany was not supported by Biblical references. On the other, 25 December, which fell near the winter solstice, contained the powerful symbolism of the birth and resurrection of the Sun. Jerome, who may have brought the Christmas festival from Rome to Antioch in the year 378,⁷² writes in one of his Christmas sermons, held in Bethlehem in the beginning of the 5th century:

Praedicationi nostrae etiam creatura consentit. Mundus ipse testis est voci nostrae. Usque ad hanc diem tenebrae crescunt, ab hac die decrescunt tenebrae: lux crescit, decrescunt tenebrae: crescit dies, decrescit error, veritas subit. Hodie nobis sol iustitiae nascitur. Simul que et aliud considerate. Inter Dominum et Iohannem Baptistam sex menses sunt: si consideretis nativitatem Iohannis et hac diem, videbitis sex menses tantum habuisse.

Even the creature consents to our sermon. The world itself testifies to our voice. Until this day, darkness increases; and from this day on, darkness decreases. The light increases, and the darkness decreases. The day increases, the error decreases, truth rises. Today, the Sun of Righteousness rises for us. And at the same time consider something else: Between the Lord and John the Baptist, there are six months. If you consider the birthday of John (i.e. St John's

⁶⁹ Vide p. 34, footnote 50.

⁷⁰ Epiphanius, Adversus Haereses (Panarion) 51,22.5, quoted above on p. 36f.

⁷¹ Vide above pp. 31ff.

⁷² Jerome visited Antioch in 378 CE. John Chrysostom writes in a Christmas sermon, which he held in 386 in Antioch, that the custom to celebrate Jesus' birth on 25 December originated from Rome. (Chrysostom, *In diem natalem domini nostri Iesu Christi*, in: *Patrologia Graeca* PG 49,353.)

Feast on 24 June; D.K.) and *this* day (i.e. Christmas; DK), you will see that there were only six months in between.⁷³

Jerome calls on nature as witness. The birth of Jesus, the "Sun of Righteousness", *can only* have taken place on the winter solstice, for reasons of analogy or cosmic harmony or because the creation is considered an expression of a divine plan.

This idea was even further elaborated by tradition, so that each of the four cardinal points of the year received its own spiritual symbolism. According to a treatise under the title "On the Solstices and Equinoxes" (*De solstitiis et aequinoctiis*)⁷⁴, which is ascribed to John Chrysostom, but probably stems from a different author, Jesus was fathered on the spring equinox and born 9 months later on the winter solstice. On the autumn equinox, John the Baptist was fathered, and he was born nine months later on the summer solstice. Thus, all four cardinal points of the year became a holiday. Even nowadays, Annunciation to the Blessed Virgin Mary is celebrated on 25 March, nine months before Christmas. The birth of John is celebrated on 24 June (St John's Feast); and in eastern churches, his conception is celebrated on 23 September. In the time of Caesar and in the early centuries of the Christian era, the equinoxes and solstices fell near these dates.

In addition to the "self-evidence" of this astro-theological speculation, the church fathers, e.g. the author of the above-mentioned treatise, also tried to find support in the Bible. The most striking clue might be given in John 3:30, where John says:

ἐκεῖνον δεῖ αὐξάνειν, ἐμὲ δὲ ἐλαττοῦσθαι.

He must increase, but I must decrease.

Tradition has considered this reference as a proof of the date of Christmas. Indeed it seems natural to refer this statements to the winter solstice. However, it could just as well refer to an equinox. On the spring equinox, day and night are of equal length. For the next three months, the day increases and the night decreases. This problem will be studied in more detail later. (pp. 363ff.)

Further to be mentioned is the Christmas sermon of John Chrysostom, bishop of Constantinople, which was probably given in the year 386.⁷⁵ He sets out from Luke 1, where it is stated that John the Baptist was fathered about 6 months before Jesus. John's mother, Elizabeth, was actually barren and had no children, and also she was old. Now when her husband, the priest Zechariah,

⁷³ (Morin), Sancti Hieronymi Presbyteri Tractatus sive homiliae in Psalmos, in Marci evangelium aliaque varia argumenta, S. 397.

⁷⁴ Botte, Les origines de Noël et de l'Épiphanie. Étude historique, pp. 93-105.

⁷⁵ Chrysostomus, In diem natalem domini nostri Iesu Christi, in: Patrologia Graeca PG 49,351-362.

was in the temple and did his service, he had a vision of the angel Gabriel, who announced to him that Elizabeth would become pregnant. Chrysostom believes that during the vision, Zechariah was in the Holy of Holies, which was accessible only to the high priest, and only once a year according to Lev. 16:29, namely during the Feast of Tabernacles (Sukkot) on the 10th of the month of Tishri. Hence, Chrysostom believes that this was the day Zechariah had the vision and the day Elizabeth became pregnant. Since Jesus' mother, Mary, became pregnant six months later, if follows that Jesus must be born 15 months later and therefore in December.

Unfortunately, this calculation is based on wrong assumptions. According to Luke 1:5-10, Zechariah was not the high priest, but just "some priest" ($ic\rho\epsilon \dot{v}\varsigma \tau i\varsigma$), and he had the vision during an incense offering that was *not* performed by the high priest, and *not* in the Holy of Holies, and on some *unknown* date. However, even if one wants to follow Chrysostom, there is no way to arrive at an exact date for the birth of Jesus. In the Julian calendar, the 10th Tishri fell on a different date every year. Moreover, it is not possible to derive exactly six months from the fact that Mary was visited by the angel Gabriel "in the sixth month" of Elizabeth. Last, but not least, the gestation does not necessarily last exactly nine months. Chrysostom's argumentation could, at best, indicate the month, but not the day, of the birth.

Thus, 25 December cannot be stringently proven as the birthdate of Jesus from the statements of the Bible. Furthermore, it is not attested further back than the 4th century. Interestingly, Chrysostom reports that critics asserted that the Christmas feast was very new, and also that it spread very fast everywhere.⁷⁶ It thus seems that Christmas became prevalent over Epiphany as the birth festival very fast, even within only a few years. However, Jerome believed that Christmas had already been an old tradition in the West. To the adherents of Epiphany in the East, who appeal to an alleged tradition of the apostles themselves, he objects that the political catastrophes that had taken place in the Holy Land did not allow an unbroken tradition.⁷⁷

Most experts are of the opinion that the oldest testimony of Christmas is found in the so-called Roman Chronography of 354 CE, an almanac that, among other historical information, lists Roman holidays. However, in reality, this source only provides proof that in its time 25 December was celebrated as the birthdate of the Roman Sun god *Sol Invictus*, whereas the reference to a birth festival of *Jesus Christ* on the same day is doubtful.⁷⁸ It should

⁷⁶ ταχέως οὕτω πανταχοῦ περιαγγελθῆναι, καὶ πρὸς ὕψος ἐπιδοῦναι τοσοῦτον, καὶ ἀνθῆσαι τὴν ἑορτήν. (352)

⁷⁷ (Morin), Sancti Hieronymi Presbyteri Tractatus sive homiliae in Psalmos, in Marci evangelium aliaque varia argumenta, S. 396: alibi pax erat, hic bellum erat : magis itaque potuit traditio ibi servari, quam hic, ubi discordia.

⁷⁸ The so-called *Calendar of Philocalus*, which is one of the lists contained in the *Chronography of 354*, mentions on the 25th December the *Natalis invicti*, i.e. the

also be noted that Epiphanius, who lived around the same time, was not aware of a Christmas festival. He only knew of a solstitial festival celebrated by Greek pagans.⁷⁹

Similar to Epiphany, which replaced older, pagan, festivals, Christmas also supplanted some pagan winter solstice feasts. E.g., such a festival was celebrated to honour the Roman sun god Sol. This festival was officially introduced by Emperor Aurelian in the year 274 CE and it was called the dies natalis solis invicti, "birthday of the undefeated sun god". However, its origin must be older. 25 December in the Julian calendar fell on the winter solstice only in the 2nd and 1st century BCE (!). This indicates that the date must have been a holiday already in earlier times. Plutarch (45-125 n. Chr.) in his writing "On Isis and Osiris" reports that in Egypt the birth of Horus (Harpocrates) was celebrated "around the winter solstice", with a sacrifice of lentils, which became mature at the beginning of the harvest time.⁸⁰ That Jesus' birth festival was celebrated on the same day as that of Horus is not astonishing, since also images of the Holy Virgin with the Child on a chair are strikingly reminiscent of representations of Isis with the Horus child. Also to be mentioned is the astrological-astronomical calendar of Antiochus of Athens (2nd cent.), who refers to Egypt and notes the following on 25 December:

birth festival of the sun god. However, another list, the *Depositio martirum*, notes on the same day, *natus Christus in Betleem Iudeae*, "Christ was born in Bethlehem in Judaea". However, this is not the same as a *dies natalis* or *festum natale*. It is not a festival that is mentioned, but the mere fact that the birth took place on this day. This becomes even more obvious when on 22 February there is talk of the *natale Petri de cathedra*, which does refer to some festival. For this and other reasons, Förster and others conclude that the mention of the birth of Christ on 25 December is only an interpolation. In fact, it seems that the text is not aware of a birth festival on 25 December, only of a festival of the pagan god *Sol invictus*. More details on this matter are found in: Förster, *Die Feier der Geburt Christi in der Alten Kirche*, pp. 95-103.

⁷⁹ Epiphanius, Adversus Haereses (Panarion) 51.22.5, quoted above on p. 36f.

Cf. also Macrobius, Saturnalia I 18,10.

The original text of the Chronography can be downloaded from the Internet:

http://www.tertullian.org/fathers/index.htm#Chronography_of_354

The Calendar of Philocalus is found here:

Inscriptiones Latinae Antiquissimae, Berlin (1893), p. 278, or here:

 $www.tertullian.org/fathers/chronography_of_354_06_calendar.htm$

The Depositio Martirum here: Monumenta Germaniae historica. Auctorum antiquissimorum tomus IX, vol. I, p. 71 or here:

www.tertullian.org/fathers/chronography_of_354_12_depositions_martyrs.htm

⁸⁰ Plutarch, De iside et osiride 65 (377b): τίκτεσθαι δὲ τὸν Ἀρποκράτην περὶ τροπὰς χειμερινὰς ἀτελῆ καὶ νεαρὸν ἐν τοῖς προανθοῦσι (διὸ καὶ φακῶν αὐτῷ φυομένων ἀπαρχὰς ἐπιφέρουσι).

Ήλίου γενέθλιον · αὕξει φῶς Birthday of the Sun. The light increases.⁸¹

That this refers to a holiday, not only to a winter solstice can be concluded from the fact that the "winter solstice" ($\tau\rho\sigma\pi\dot{\eta}$ $\chi\epsilon\mu\epsilon\rho\nu\dot{\eta}$) is mentioned separately, three days earlier, on 22 December, which was astronomically correct in his time.

Unfortunately, no sources are preserved that could provide information on ancient Celtic and Germanic solstice festivals. However, this does not mean they did not exist. It is known that prehistoric cultures of central and northern Europe gave great importance to the solstices. This is testified by the Goseck circle in Germany (4800 BCE), the mound and passage tomb of Newgrange in Ireland (3150 BCE), Stonehenge (3rd millennium BCE), and the Sky Disc of Nebra (1600 BCE), to mention only the most famous examples.

Church Fathers time and again indicate that on Christmas there were also pagan celebrations to the honour of the sun god. Augustine (354-430) in a Christmas sermon admonishes his audience to celebrate Christmas not because of the Sun, but because of the one who created the Sun and who is the Sun of Righteousness.⁸² In the 5 century, Pope Leo I writes in his second Christmas sermon:

... illudens (tentator) simplicioribus animis de quorundam persuasione pestifera, quibus haec dies solemnitatis nostrae, non tam de nativitate Christi, quam de novi, ut dicunt, solis ortu honorabilis videatur.

... (the tempter) whispers to the more simple-hearted souls the pernicious conviction of some who consider this day honourable not so much because of the birth of Christ, but rather, as they say, because of the rising of the new Sun.⁸³

A Syrian scholar of the 12th century writes⁸⁴:

حمَّلَ مَعانُ مَعَانُ اللَّهُ حَتَّ حَمَّ حَمَّ حَمَّ مَعَمَ الْحَدَيْ حَمَّ الْعَنَى حَمَّلَ الْمَتَحْثَمَ حَمَد نَمَحْم خُدَان مَمْهِ لَحَمانُه أَسَلَا مَالَا مَنْ الْعَمَ . حُمَّلًا الحص حمَّمَ المَالا مَ مَالا حَدان مَنْ المَ عَمَان اللَّهُ مَا اللَّهُ مَن المَ عَد المَ المَمان مَالا عَدان مَن اللَّا مَعْنَ الْمَا الْمَا مَعْنَ المَا المَا المَا المَا المَا المَ

⁸¹ Boll, *Griechische Kalender I*, pp. 16 and 40ff.

⁸² Augustine, Sermo 190,1 (PL 38,1007).

⁸³ Leo I, *Sermo* 22,6. More references are given by Thomas of Edessa (6th cent.) in his writing *Tractatus de nativitate domini nostri Christi*, chap. 10, and in the treatise by Pseudo-Chrysostom *De solstitiis et aequinoctiis*, II.

⁸⁴ Assemanus, Bibliotheca Orientalis Clemento-Vaticana, vol. 2, p. 164.

⁸⁵ The Latin translation by Assemanus reads:

Mense Ianuario natus est Dominus eodem die quo Epiphaniam celebramus, quia veteres uno eodemque die festum nativitatis et Epiphaniae peragebant, quoniam eadem

In the month of January ("the second *konun*") was our Lord born, on the 6th, just on the day on which we celebrate Epiphany; because the ancients observed on one and the same day the feast of the birth and that of Epiphany. For, this is the day he was born and baptised, and on which even nowadays the Armenians celebrate both [events] on one day as the same festival. And the Scholars also sometimes speak about both [events/festivals] at the same time.

خلاکہ ٦ ، عبدلعه ܐ تَصُمُلا لمَ ، ٦ حَمَه م مَحَدَه مَ حَمَه حَمَه حَمَه مَ مَدَم حَمَه مَ مَ مَ مَ مَ مَ مَ مَ مَدَحُنَه مُهُ مَهُ مَن . جَملَ مِهُ ٢ كَما مَعْت حَملَه ٢ دَعالاً مَلْه ٢ دَعَميْه مَ دَمُهُ ٢ مَهُ ٢ حَمَّ حَمَّه مَ مَدَم مَحْمدَى مَ مَهُ ٢ مَ مَهُ ٢ مَعْم المَا مَ . ⁸⁸ مَحْمدُه . ⁸⁸

The reason why the Fathers put it off and celebrated it on the 25^{th} of December is the following: For the pagans, the feast that was on the 25^{th} of December was the feast of the birth (literally: the feast of the house of the birth; D.K.) of the Sun; and on this [day], they lighted fires for the glory of the feast. And they also invited the people of the Christians to the festivities and participation in such deeds.

And when the scholars saw that the Christians were attracted to such [things], they conceived the plan and celebrated the feast of the true birth on this day and the feast of the baptism on the other [day], the 6th of January. And like this, they continue to kindle fires according to this custom until this day. Since the Sun has now (on 6 January) risen 12 degrees, he was born on this 13th day. And as Saint Ephrem says, the mystery [of this day] has indicated Him (Christ), the Sun of Righteousness and His 12 apostles.

These statements are late and polemical and are not necessarily the historical truth. The above-mentioned sources, in particular the considerations of

die natus et baptizatus est. Quare hodie etiam ab Armenis uno die ambae festivitates celebrantur. Quibus adstipulantur Doctores, qui de utroque festo simul loquuntur.

⁸⁶ Causam porro, cur a Patribus praedicta solemnitas a die 6. Januarii ad 25. Decembris translata fuit, hanc fuisse ferunt. Solemne erat ethnicis hacipsa die 25. Decembris festum ortus solis celebrare ; ad augendam porro diei celebritatem, ignes accendere solebant : ad quos ritus populum etiam Christianum invitare et admittere consueverant.

⁸⁷ Quum ergo animadverterent Doctores ad eum morem Christianos propendere, excogitato consilio eo die festum veri Ortus constituerunt ; die vero 6. Januarii Epiphaniam celebrari iussere. Hunc itaque morem ad hodiernum usque diem cum ritu accendendi ignis retinuerunt. Et quoniam sol duodecim gradus ascendit, Dominus natus est hac die tertiadecima, et sicut S. Ephraem docet, solis iustitiae et duodecim Apostolorum eius mysteria repraesentat. Epiphanius, make it obvious that the Church Fathers were *convinced* that for *reasons of cosmic harmony*, Jesus had to have been born on the date they referred to, and they were of the opinion that the pagans, in celebrating their feasts on the same date, had *understood a part of the truth*.⁸⁸ The date of their festivities was correct, only the deity adored by them was wrong. Thus if the Church Fathers scheduled the birth of Jesus on dates of pagan festivals, it was not for the purpose of repressing paganism, but *because they were themselves convinced of those dates*.⁸⁹

The texts considered so far dating the birth of Jesus on 25 December, do not indicate a birth year. However, the *Consularia Constantinopolitana*, a list of roman consuls, notes:

752. Octaviano XIII et Silano. His conss. natus est Christus die VIII cal. Ian.

(Year) 752 (from the foundation of Rome = 2 BCE): Octavianus, 13[th year in office], and Silanus. When these were consuls, Christ was born on the 8th before the Calends of January.⁹⁰

... i.e. on 25 December 2 BCE. This text could go back to the 4th century, because Epiphanius quotes it, however having the 8th before the *Ides* (= 6 January) rather than the 8th before the *Calends* (= 25 December).⁹¹

An entry in the Fasti Consulares reads as follows:

754 Caesare et Paulo Sat. XIII. Hoc cons. Dns. ihs. XPC natus est VIII Kal. Ian. d. Ven. luna XV

[Year] 754 (from the foundation of Rome = 1 CE): Under [C.] Caesar [Augustus] and [L. Aemilius] Paullus, Saturday, [Epact⁹²] 13. During this consulship, the Lord Jesus Christ was born on the 25^{th} of December, on Friday, Moon [was] 15 [days old].⁹³

⁹¹ Epiphanius, Adversus Haereses (Panarion) 51,22,4; quoted above on pp. 36f.

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⁸⁸ Vide quotation from Epiphanius on pp. 38ff.

⁸⁹ Hans Förster apparently fails to recognise this fact. From the fact that the church fathers in their debates about the correct nativity festival never accuse their opponents of having taken their festival from the pagans, he concludes that the Christian nativity festivals are not derived from heathen models at all. (Förster, *Die Anfänge von Weihnachten und Epiphanias*, pp. 12ff.) However, since Jerome calls nature itself to witness that Jesus must have been born on 25 December, and if he believes this to be a convincing argument, then polemic of the kind Förster expects makes no sense at all.

⁹⁰ "Consularia Constantinopolitana", in: *Monumenta Germaniae historica. Auctorum antiquissimorum tomus IX*, vol. I, S. 218.

⁹² The epact is the age of the Moon in days on 31 December of the previous year, reckoned from the previous sliver of the Moon. This number changes from year to year.

⁹³ The original text is found here:

There is talk of 25 December 1 CE. The information concerning the birth of Jesus was interpolated, probably *after* the time of Dionysius Exiguus, who had introduced the year numbering system Anno Domini. Incidentally, the information given in this text is wrong. 25 December 1 CE was not a Friday, but a Sunday. One year earlier, it was a Saturday, two years earlier, a Thursday. The age of the Moon is not correct either.

Anno Domini

In the year 525, the Roman monk Dionysius Exiguus introduced the year numbering of the *Anno Domini* or *Common Era* that is still used today. He fixed its beginning in the year 754 *ab urbe condita* (from the foundation of Rome), which he considered to be the birth year of Christ. However, it is not quite certain whether Dionysius assumed the birth of Jesus on 25 December 1 BCE (= year 0), thus a few days before the beginning of the year 1 CE (AD), or a year later on 25 December 1 CE (AD).⁹⁴ It remains unclear how he arrived at this beginning of his year numbering system, because he did not give any detailed explanations. However, this author believes that it can be explained as follows:

The year numbering system *anno domini* was a side-product of his improved *Easter tables*. So-called "Easter tables" were used to determine the date of Easter. They work on the basis of the so-called *Metonic Cycle*, i.e. the fact that 19 years correspond to almost exactly 235 lunar months and that the same lunar phase recurs every 19 years on the same calendar date. Consequently, Passover full moons recur around the same calendar date every 19 years. A table that covers only 19 years is sufficient to determine very easily the Passover full moon for any given year. The subsequent Sunday is Easter.

The 19-year Easter cycle had of old been reckoned from the inauguration of the Roman Emperor Diocletian in the year 285 CE. Now, since 285 = 15 x 19, it turns out that the year 0 (1 BCE) was also the beginning of a Metonic cycle. The question arises if this could have been the reason why Dionysius assumed the birth of Jesus on 25 December 1 BCE and started the year 1 *anno domini* on the following 1 January. Most likely, he set out from the presupposition that Jesus, who had declared himself "the alpha and the omega", had to have been born at the beginning of a 19-year Easter cycle

Monumenta Germaniae historica. Auctorum antiquissimorum tomus IX, vol. I, p. 56. http://www.tertullian.org/fathers/index.htm#Chronography_of_354 , or here: http://www.tertullian.org/fathers/chronography_of_354_08_fasti.htm

 94 It is mostly assumed that it was 1 BCE (= year 0). However, Georges Declercq arrives at the conclusion that Dionysius dated the birth of Jesus on the 25th December 1 CE. (Declercq, *Anno Domini: The origins of the Christian era*, 2000; idem, "Dionysius Exiguus and the introduction of the Christian era", in: *Sacris Erudiri* 41 (2002): 165-246).

and that the traditional 19-year rhythm had actually started out from him. In fact, it would have been in agreement with the ancient way of thinking that Jesus, who had been born on the winter solstice and in harmony with the solar year, would also have been born at the beginning of the Easter cycle. In other words, the Easter cycle even "proved", so to speak, the birth year of Jesus.

However, Dionysius also went beyond older Easter cycles. He introduced a greater cycle of 532 years, which also began in the year 1 BCE, but ended and repeated itself only in the year 532 CE. This greater cycle results from the fact that Dionysius combined the 19-year Metonic Cycle with a 28-year cycle, in which a particular date in the Julian calendar fell on the same day of the week again. This means that after $19 \times 28 = 532$ years, the Passover full moon not only fell on the same date, but also again on the same week-day. Since Easter fell on the following Sunday, it follows that after 532 years, Easter also fell on the same date.

Since Dionysius' Easter cycle was based on the Julian calendar, it broke down with the introduction of the Gregorian calendar and had to be replaced by some more complicated mechanism.

Summary

What answers did early Christian authors give to the question of the birth date of Jesus? It has turned out that they actually did not know more than is known today, that they just relied on the known clues given by the Bible, and that no other sources were available to them. Still, they drew different conclusions than modern authors. While today it is generally assumed that Jesus must have been born before the death of Herod, which is dated to the year 4 BCE, early Christian authors usually believed, on the basis of information given by Luke, that Jesus must have been born in the year 3 or 2 BCE.

Furthermore, early Christians had no generally accepted idea about his exact birth date, and they did not celebrate any birth feast of Jesus. Clement of Alexandria (2nd/3rd cent.) considered attempts to determine Jesus' birth date as "overzealous". When modern authors assert that Clement assumed the birth of Christ on 18 November 3 BCE, then this assertion is based on an erroneous interpretation of his explanations. Clement did not intend to find the exact date, only the year. However, he reports that some authors had dated the birth of Jesus to 6 or 7 April, others on 20 May. The April dates seem to be based on the assumption derived from Luke, that Jesus was exactly 30 years old on the day of his baptism and exactly 31 years old on the day of his crucifixion. If they were right, then Christmas would have to be celebrated on Passover or Easter. However, these birth dates are most probably based on pure speculation. As regards 20 May, Clement does not give any clue concerning its origins or reasons. It cannot be easily explained by calendar speculation, wherefore it seems more authentic than the April dates. Was Jesus born on 20 May? Clement himself does not consider this date reliable either.

In the 3rd century, Hippolytus and the anonymous author of the writing *De pascha computus* assumed the birth of Jesus on a Passover date and ideally on a spring equinox. In Epiphanius' opinion, however, who lived in the 4th century, Jesus was born on 6 January, 13 days after the winter solstice. Nowadays, "Three Holy Kings" or "Wise Men from the East" are celebrated on this day, however in the 4th century, it was considered the date of both the birth and the baptism of Jesus. Nevertheless, Epiphanius was of the opinion that the birth of Jesus was related to the winter solstice, and he considered the number of 13 days that separated the solstice from the birth festival as representing the 12 apostles and Jesus himself. Similar ideas are found in the writings of the Syrian saint Ephrem. Also in the fourth century, thus in the life time of Epiphanius, John Chrysostom propagated 25 December, which was considered the date of the winter solstice, as the correct birth date of Jesus.

Moreover, it has been shown that early Christian authors in their attempts to find the birth date of Jesus, did not only rely on statements made by the Bible, but also on considerations of a more philosophical nature, like calendar mysteries and "astro-theological" speculation. They were convinced that Jesus' birth and death had to fall on particular dates that were in symbolic harmony with the astronomical and agricultural year, which was considered a sacred order created by God. It was believed that the Son of God had to have been born either near the spring equinox or near the winter solstice. Pagan cults may have been the model, however it is not true, as some believe, that the Christmas festival was introduced *for the purpose* of repressing and replacing those pagan cults. Rather, the Church Fathers were convinced that Jesus, the true "Sun of Righteousness" in reality had to have been born on a cardinal point of the solar year and that the pagans, as a result of *some* insight into the truth, celebrated their feasts on the correct date, however in honour of the wrong deity.

The Magi from the East

Priests and Astrologers in Ancient Persia

Whether the story about the *magi* and of the star is true historical fact is, in this author's opinion, an open question. It may be nothing but an invention by Matthew or one of his sources. It is not the intention of this work to give an answer to this question. Nevertheless, in trying to understand Matthew's account and to learn what star or astral phenomenon exactly he had in mind, it may be helpful to ask who the *magi* were and how they acted.

In popular Catholic view, the "magi" who visited the holy family in Bethlehem were the "Three (Holy) Kings from the East". Protestant tradition prefers to speak of the "Wise Men from the East". The preferred translation of the Greek word *magoi* in English Bibles is also "wise men". However, these are not correct translations, but *interpretations*, and in fact they are incorrect. There is no mention of "kings" ($\beta\alpha\sigma\iota\lambda\epsilon\tilde{\iota}\varsigma$) or "wise men" ($\sigma\circ\phioi$) in the original text of Matthew. The Greek word *magos* ($\mu\acute{\alpha}\gamma\circ\varsigma$) actually means "magician". A *magos* was understood to be a priest of the Zoroastrian religion, which had its origin in Persia. Among other things, the *magoi* were engaged in practices that would be called "magic" even today. Therefore, it is appropriate to either translate the word "*magos*" as "magician" or leave it untranslated and render it as "*magi*", as some English translations do.

The reinterpretation of magi to mean kings was undertaken by early Christian theologians. The reasons for this become clear when it is understood that the church saw magic arts as coming from the devil and therefore did not want to link the name of the Son of God with magicians. Incidentally, by interpreting them as kings, it was possible to give the story of the visitors from the East the appearance of a fulfilment of an Old Testament prophecy. Psalm 72:10-11 says the following:

> מַלְכֵי תַרְשִׁישׁ וְאִיִּים מַנְחָה יָשִׁיבוּ מַלְכֵי שְׁבָא וּסְבָא אֶשְׁפָר יַקְרִיבוּ:

βασιλεῖς Θαρσις καὶ αἱ νῆσοι δῶρα προσοίσουσιν, βασιλεῖς ᾿Αράβων καὶ Σαβα δῶρα προσάξουσιν[•] (Septuagint) Let the kings of Tarshish and of the islands bring presents. The kings of Sheba (Yemen) and Saba offer gifts. (*Septuagint:* The kings of the Arabs and of Saba...)

וִיִשְׁתַּחֲוּוּ־לוֹ כָּל־מְלָכִים כָּל־גּוּיִם יַעַבְדוּהוּ:

καὶ προσκυνήσουσιν αὐτῷ πάντες οἱ βασιλεῖς, πάντα τὰ ἔθνη δουλεύσουσιν αὐτῷ.

And let all kings bow down before him, all nations serve him. (New American Bible)

וְהָלְכוּ גֹויִם לְאוֹרֵך וּמְלָכִים לְנֹגַה זַרְחֵך:

καὶ πορεύσονται βασιλεῖς τῷ φωτί σου καὶ ἔθνη τῇ λαμπρότητί [τῆς ἀνατολῆς (var.)] σου.

(3) And nations will wander to your light, and kings to the brightness of your rising. ...

כֵּלָם מַשְׁבָא יָבֹאוּ זָהָב וּלְבוּנָה יִשָּׂאוּ וּתְהַלֹת יְהוָה יְבַשֵׂרוּ:

... πάντες ἐκ Σαβα ἥξουσιν φέροντες χρυσίον καὶ λίβανον οἴσουσιν καὶ τὸ σωτήριον κυρίου εὐαγγελιοῦνται
(6) ... All from Sheba shall come, bearing gold and frankincense, and proclaiming the praises of the Lord. (New American Bible)

In the third century, church father Tertullian (150 - 220 CE) is the first to connect the role of a magician with the dignity of a king:

Magos reges habuit fere oriens.

The Orient considered the magi as kings, as it were.95

It is true, at least, that *magi* played an important part at the royal courts of the Parthian, Persian, and Babylonian Empires. Was Matthew thinking of envoys of foreign kings who conveyed their homage and presents to the new-born king of the Jews? The Parthian king, Tiridates I, who visited Nero in the year 66 and prostrated before him, was himself a *magos*. Was Matthew thinking of Tiridates? The above-quoted Old Testament texts refer to peoples of Arabia and Syria. In Jesus' time that was the territory of the Nabateans. The Nabateans were an Arabic people that had taken over the Aramaic language and whose culture was strongly influenced by the Hellenistic, Persian, and Babylonian cultures. It is possible that *magi* played a role at the Nabatean royal court, too. Little is known about the south-Arabian kingdoms in the time of Jesus.

In any case, Justin Martyr (100 - 165 CE) and Tertullian (150 - 200 CE) were of the opinion that the magi came from Arabia. They drew this conclusion from Old Testament prophecies.⁹⁶ The gifts of the magi can indeed point to their origin in Arabia because frankincense and myrrh were not Persian products; they came from Arabia or the land of the Nabateans. These gifts are also mentioned in Isaiah 60:6 (quoted above) and may have been taken over from there.

⁹⁵ Tertullian, Adversus Marcionem, 3.13.

⁹⁶ Tertullian, op. cit. 3.13; Justin Martyr, *Dialogus cum Tryphone* 34; 78.

However, it seems that Matthew himself is referring to the verses quoted above from Isaiah 60. Matthew's words "his star in the rising" (αὐτοῦ τὸν ἀστέρα ἐν τῇ ἀνατολῷ, Matth. 2:2) is reminiscent of the Isaiah's "the brightness of your rising" (止ζӊ Ἰμҵҕ), in the Septuagint: τῷ λαμπρότητί τῆς ἀνατολῆς σου (var.); Isaiah 60:3; cf. vs. 1), even more so as Isaiah 60:6 also mentions the gifts gold and frankincense. Was Matthew already of the opinion that the magi came from Arabia? The magi came "from east" (ἀπὸ ἀνατολῶν). In Old Testament texts, the "east" stands for Arabia (Judges 6:3, פָנֶי־קֶנֶם, oi vioù ἀνατολῶν; cf. Job 1:3). It is not certain, however, whether he is thinking of the "kings" of Psalm 72.

Another clue considered by early Christian authors was the figure of the prophet Balaam, who, according to common exegesis, had linked the appearance of some future Israelite king with the appearance of a star. When, in the time of Moses, the Israelites were about to conquer the kingdom of Moab, Balak, the king of Moab had the prophet Balaam come and told him to curse the Hebrews and thereby weaken them. When observing the army of the Hebrews from a hill, Balaam has a vision and sees a future descendant and powerful king of this people. Entering into spiritual ecstasy, he makes the following statement instead of a curse:

אֶרְאָנּוּ וְלֹא עַתָּה אֲשׁוּרָנּוּ וְלֹא קָרוֹב דָּרָדְ כּוֹכָב מִיַּעֲקֹב וְקָם **שֵׁבֶט** מִיִשְׂרָאֵל וּמָםץ פַּאֲתֵי מוֹאָב וְקַרְקַר כָּל־בְּנֵי־שֵׁת

Δείξω αὐτῷ, καὶ οὐχὶ νῦν[·] μακαρίζω, καὶ οὐκ ἐγγίζει[·] ἀνατελεῖ ἄστρον ἐξ Ιακωβ, καὶ ἀναστήσεται ἄνθρωπος ἐξ Ισραηλ καὶ θραύσει τοὺς ἀρχηγοὺς Μωαβ καὶ προνομεύσει πάντας υἰοὺς Σηθ. I see him, but not now; I behold him, but not near; *A star shall come forth* from Jacob, A *sceptre* shall rise from Israel, And shall crush through the forehead of Moab, And tear down all the sons of Sheth. (Numbers 24:17, NASB)

It need not be discussed here whether or not this prophecy fits Jesus. However, it is a fact that Jews and Christians interpreted these verses as a prophecy of the Messiah.⁹⁷ Since Matthew in his Gospel loves to refer to Old Testament passages, it is very likely that in his account of the "star" of Bethlehem, he has this old prophecy of Balaam in mind. The Old Testament idea that the birth of the king of Israel had to coincide with the appearance of a star, will be dealt with shortly.

⁹⁷ Ulrich Luz, *Das Evangelium nach Matthäus*, Zürich-Einsiedeln-Köln, 1985 (Benziger), p. 114f.

Origen (185 – 254 CE) believed that the *magi* came from Mesopotamia, that they knew about the prophecy of Balaam, and were descendants of his tradition.⁹⁸ However, Balaam was neither Babylonian nor Persian. He lived in a region just beyond the Jordan, east of, but not very far from, Jerusalem. Interestingly, the Jewish philosopher Philo of Alexandria (15 BCE – 40 CE) nevertheless calls Balaam a *magos*.⁹⁹ Further evidence is provided by an inscription that was excavated in 1967 in Deir 'Allā in Jordan and dated to about 800 BCE. It seems to prove that Balaam, the son of Beor, was a historical person, a renowned "seer of the gods" or "man who sees the gods" (*'š hzh 'lhn*). It is stated that he talked to the gods at night and learned from them what they had decreed in their council.¹⁰⁰ So, did the *magi* come from Jordan or Syria?

Justin and Tertullian were of the opinion that the *magi* came from Damascus, again based on Old-Testament prophecies.¹⁰¹ According to current Christian interpretation, Isaiah 7:14 prophesies the birth of a boy from a virgin. A bit later, in Isaiah 8:4, an interesting statement is made, which in the Septuagint reads as follows:

διότι πριν η γνωναι τὸ παιδίον καλεῖν πατέρα η μητέρα, λήμψεται δύναμιν Δαμασκοῦ καὶ τὰ σκῦλα Σαμαρείας ἔναντι βασιλέως ᾿Ασσυρίων.

Therefore, before the small child knows to call father and mother, he will seize the power of Damascus and the spoils of Samaria in the presence of the king of Assyria.

Justin and Tertullian interpreted this statement as meaning that the new-born baby Jesus subdued the magi who came from Damascus, and he did so in the presence and against King Herod the Great. Of course, one can doubt the correctness of the Septuagint as well as the interpretation by the Church Fathers. However, it is a fact that Matthew 1:23 makes reference to the "birth from a virgin" of Isaiah 7:24. Could he also have thought of Isaiah 8:4 and the above interpretation? Since he used to refer to the Septuagint, not the Hebrew Bible, this is not unlikely at all.

However, more wide-spread was the opinion that the *magi* were Persians. According to the *Arabic Infancy Gospel*, chap. 7, the visit of the *magi* in Jerusalem and Bethlehem was motivated by a prophecy of the Persian prophet Zoroaster.¹⁰² There are illustrations in early churches, where the magi are

⁹⁸ Origenes, *Homilia in Numeros* 13.7; *Contra Celsum* 1.60.

⁹⁹ Philon von Alexandria, Über das Leben Mose (Περὶ βίου Μωσέως) I,276.

¹⁰⁰ Nach Hoftijzer/Franken, Aramaic Texts from Deir 'Alla; Hoftijzer/Kooij, The Balaam Text from Deir 'Alla Re-evaluated.

¹⁰¹ Justin Martyr, *Dialogus cum Tryphone* 78; Tertullian, *Adversus Marcionem*, 3.13; *Adversus Judaeos* 9.

¹⁰² Quoted in the present work on p. 75.

shown wearing Persian dress.¹⁰³ Persian legends assert that the magi described in Matthew's Gospel came from the West-Persian city of Ekbatana, known today as Hamadan, which had been the capital of the Medes in earlier times. In the thirteenth century, Marco Polo pointed out their graves in Saveh, south-west of Teheran, the centre of astrology in Islamic times. However, several different places in the region claimed to be the home of the *magi*.¹⁰⁴

In Jesus' times, however, magi lived in many countries, so that one should not claim to know exactly where they came from or assert that they came from Persia. Acts 13:6ff. even mentions a "Jewish pseudo-prophet of the name of Bar Jesus, who was a magician" and lived on Cyprus (ἄνδρα τινά μάγον ψευδοπροφήτην Ιουδαΐον, δό ὄνομα Βαριησοῦς). Philo of Alexandria, a contemporary of Jesus, in his writing on the life of Moses even calls the priests of the Egyptian Pharaoh magoi.¹⁰⁵ This proves that so-called magi did not even have to be of Persian origin. The magi from the east need not have come from Persia, but could have come quite as well from Babylon, the true home of astrology. Even then, they need not have been native Persians, but could have been Babylonians or even Babylonian Jews. In other words, the geographic origin and nationality of Matthew's magi cannot be identified with certainty. However, it is known that since the conquest of Babylon by Cyrus, Babylon was an important administrative centre of the Persian empire. Cumont states that Babylon was the winter residence of the Persian king, and it is known that the king was always accompanied by a great staff of *magi*.¹⁰⁶ Furthermore, it is known that a considerable number of Jews still lived in Babylon, because not all Jews had returned from their Babylonian exile. It is thus quite possible that Matthew was thinking of Jewish magi who were resident in Babylon. It is also very plausible that Babylonian Jews expected the birth of the Messiah in Jerusalem. Thus the arrival of Babylonian magi in Jerusalem would have seemed quite natural.

As has been mentioned already, the term "*magi*" originates from Persia. The word *magos*, Old Persian *magush*, was originally the name of an Old Persian (Median) tribe. Later it was only used for members of the priestly caste of the Medes and Persians. Their religion, described in the *Avestic writings* (also called *Avesta*) was originally polytheistic, and closely related to the Old Vedic religion of India. Around 1000 BCE Zoroaster came forward and

¹⁰³ For example, in the sixth-century Basilica of San Vitale in Ravenna. Here they have also been inscribed with the familiar names Caspar, Melchior, and Balthasar. These names, however, are not of Persian but of Semitic origin. Manfred Barthel also points to the Church of the Nativity in Jerusalem which was spared when the Persians conquered Jerusalem in 614, because here the three kings were depicted wearing Persian clothes.

¹⁰⁴ Kidger, *The Star of Bethlehem*, p. 193.

¹⁰⁵ Philon von Alexandria, Über das Leben Mose (Περὶ βίου Μωσέως) I,92.

¹⁰⁶ Cumont, *Die Mysterien des Mithra*, p. 10.

introduced monotheism. However, old beliefs, old gods, sacrifices and rites were not abolished during this significant reform but instead such phenomena were integrated. The gods were given similar importance to the saints and angels in Catholicism. In addition, when the Persians conquered the Assyrian empire, the *magi* came into contact with the Chaldeans, the Babylonian priests, and they had to deal with their prophetic techniques, especially with their very comprehensive astronomical and astrological knowledge.

In the Persian Empire, the magicians functioned as priests and advisors to the kings. They were familiar with various techniques used in prophecy, with the interpretation of dreams (as mentioned in Matthew), with all kinds of omens, and with the motions of the stars and planets. They were also familiar with magical practices that served to prevent anticipated disasters or to bring about any desired event.¹⁰⁷ The fact that the *magi* in Jesus' time were really practicing magic becomes obvious in Acts 8:9ff., where a certain Simon is mentioned who practices "magic" ($\mu \alpha \gamma \epsilon i \omega \gamma$).

The magi¹⁰⁸ played an important part in the process of the expansion and consolidation of the Persian Empire. By means of religious propaganda they paved the way for their lord. When Egypt and Babylon were conquered, the Persian kings Darius and Cyrus proclaimed themselves as the rightful ruler, who was chosen by the gods of the country. The conquest of the city of Babylon was achieved practically without bloodshed, because Cyrus allied himself with the Marduk priests of Babylon against the Babylonian King Nabonidus, who was a worshipper of the Moon god Sîn and tried to do away with the cult of Marduk. To the Jews in Babylonian exile, Cyrus presented himself as the "shepherd" (Isaiah 44:28) and "messiah" (Isaiah 45:1), chosen by Yahweh himself. He sent them back to their country and even had them rebuild the temple of Jerusalem. The priests of the god Apollo of Miletus and Delphi were also won over by the Persians. The conquest of Greece only failed because of the clever policy of the Athenian Themistocles. Even after the downfall of the Achaemenid Empire, the magi in many places made propaganda against the Greek and Roman dominion and in favour of a restitution of the true and divinely ordained Achaemenid dominion.¹⁰⁹

As can be seen, other than Jews, Christians, and Moslems, the *magi* dealt with other religions in a very open-minded way. They did not consider them "wrong" or despicable, but searched for commonalities and appreciated the foreign doctrines, interpreting them in harmony with their own. From this point of view, it is quite plausible that Matthew has the *magi* come to Jerusalem to worship the new-born "god king". This kind of behaviour seems to be in agreement with the way of thinking of the *magi*. Also, it is think-

¹⁰⁷ A very detailed research on the *magi* can be found in: Roberts, *The Star of the Magi*.

¹⁰⁸ The following considerations concerning the *magi* are inspired by Courtney Roberts' book.

¹⁰⁹ Roberts, *The Star of the Magi*, pp. 73ff.

able that Matthew thought of *Jewish magi* from Babylon, comparable to the above-mentioned Jewish *magus* Bar Jesus in Cyprus.

In religious instruction, the Star of Bethlehem is traditionally interpreted as a miraculous appearance, not as an astronomical phenomenon. The word *magoi*, "magician", however, leads one to conclude that these are Mesopotamian or Persian astrologers, especially as they come from the East and "a star in its rising" is mentioned in the context. Mesopotamia was the original homeland of astrology, and it was famous for its astrologers. Furthermore, the first appearance of a planet in the eastern morning sky, i.e. at the ascendant, was particularly noteworthy to ancient astrologers. In general, if a planet was rising at the moment of somebody's birth, then this planet was considered to be particularly important to that person's character and destiny. If no planet was rising in the moment of birth, even then the ascendant, i.e. the rising zodiac sign, was of interest. In particular, the first appearance of a planet, i.e. its heliacal rising was considered important amongst both Mesopotamian and Greek-Egyptian astrologers. Matthew seems to be describing such a star's appearance in the east precisely. Also, when further on in the text the "standing still" of the star is mentioned, this points to an astronomical phenomenon, the so-called "station" of a planet, which was considered equally important in astrology. These issues shall be dealt with later. However, at this point it is clear that it would be naive to believe that a miraculous appearance was being reported.

In order to understand the Star of the Messiah it is necessary to study the teachings of ancient astrologers. Unfortunately, no astrological writings of the *magi* are extant that could inform us about their doctrines. It is known, however, that at the time of Jesus, Greeks, Romans, Egyptians, Chaldeans, Persians, and even Indians, all used very closely related forms of astrology. They all cast birth horoscopes in a similar way, they used the same zodiac signs, the same system of sign rulers, exaltations and trigons, the ascendant, the system of the houses ("places") etc. Thus, it is not true that nothing is known about the astrology of the *magi*. The extant writings of Greek, Roman, and Babylonian astrologers can give a very good impression of the astrological doctrines of the *magi*.

It even may be an illusion that in general so little is known about the ancient Persians and their sciences, but so very much about Greeks, Romans, and Mesopotamians. Does not the renaissance of the Greek culture after the military campaigns of Alexander the Great raise the suspicion that the Greeks assimilated Persian sciences on a grand scale and presented them as their own achievements?¹¹⁰ The fact that Greek culture received a lot of important inspirations from Egypt, Mesopotamia and Persia, has been increasingly acknowledged by recent scholars. In fact, there is considerable evidence that Hellenistic astrology is essentially Mesopotamian and Persian. It was the

¹¹⁰ An impressive plea for this interpretation of the history of science is given by Courtney Roberts in *The Star of the Magi*, pp. 60f.

Hellenistic Babylonian Berossus, who in 300 BCE founded the first astrology school of Greek language on the island of Kos. Research by the assyriologist F. Rochberg has shown that the fundamental elements of Hellenistic astrology also appear in cuneiform texts of the Hellenistic epoch.¹¹¹ The astrological technique of the "spear-bearers" (δορυφόροι), which will be studied later in detail, was obviously inspired by the royal guard of the Persian king, which consisted of spear-bearers.

The American astronomer Michael Molnar is thus certainly right in pointing out that the astrological teachings of the *magi* at the time of the birth of Christ agree in essence with those of the Greeks and Romans and that authors like Ptolemy, Vettius Valens, Firmicus Maternus etc. should be considered when searching for the Star of the Messiah. Other than that, archaeological evidence about late Mesopotamian astrology has been found and published during the last decades. Even Indian sources from post-Hellenistic times could, in principle, provide important clues about astrological doctrines of the *magi*.

Roberts criticises this kind of approach and tries to extrapolate the astrology of the *magi* from Sassanian and Arabic astrology.¹¹² However, she might be on the wrong tack here. On the one hand, Roberts herself is of the opinion that the Greeks had taken over part of their sciences from the Persians. On the other, she also states that the Sassanians, in their attempt to take up the Achaemenid Empire and culture, were confronted with the problem that a lot of the Old Persian cultural heritage had been lost. The astrology of the Sassanians and Arabs was mostly shaped by Greek and Indian influences (Ptolemy, Siddhāntas). In particular, when Roberts asserts that the Sassanian *astrology of history* could go back to the *magi*, then this is nothing but speculation. The idea that history evolves in agreement with astrological eras that begin and end with Jupiter-Saturn conjunctions is not attested in Hellenistic or Babylonian astrology. It might be an invention of Sassanian times.¹¹³

Hellenistic astrology was thus a "global" intellectual current that was spread over the whole Hellenistic world. However, this does not mean that it was a unified system. In detail, the systems of different authors differ considerably. Also, the astrological conception of life and existence had to be adapted and integrated into the respective culture and religion. It will be found that in the case of Matthew and his story about the *magi*, Old Testament ideas played an important role, which most probably must have formed part of the then Jewish astrology, too.

¹¹¹ Vide F. Rochberg's books *Babylonian Horoscopes* and *In the Path of the Moon: Babylonian Celestial Divination and its Legacy.*

¹¹² Roberts, op. cit., pp. 12ff.

¹¹³ More information on astrological Jupiter-Saturn theories is given in the present work on pp. 150ff.

Zoroaster's Prophecy of a Redeemer

Matthew's report about the *magi*, who possibly belonged to a Zoroastrian tradition, makes very good sense for the following reason: Zoroaster had predicted that at some time a *Saoshyant*, that is, a "saviour", would appear on the earth. He would vanquish evil once and for all and would lead creation into a state of peace and bliss. In the end, he would kill a bull, and from his fat, mixed with *haoma*-juice¹¹⁴, he would prepare a draught that would make humans immortal.¹¹⁵ The analogy between the *Saoshyant* and the "saviour" figure of Jesus Christ are openly apparent.

Moreover, Zoroastrian tradition teaches that this *Saoshyant* himself and two of his precursors would be born of virgins. When Zoroaster came to his third wife $Hv\hat{o}v\hat{i}$, his seed fell onto the ground three times. A god or an angel named Nêryôsang took the "light and the strength" of these outpourings and brought them to the water-goddess Anâhîd (*Anâhitâ*), who has kept them since then in the lake *Kansaoya*¹¹⁶. In the course of thousands of years three virgins, themselves remote descendants of Zoroaster, will bathe in this lake and will become pregnant. The last one will give birth to the *Saoshyant*. His name will be *Astvat-Ereta*.¹¹⁷

Thus, the Zoroastrians had a salvation prophecy and Matthew's text of the appearance of the magi, and with it the story of the virgin birth, asserts by implication that Jesus is not only the expected Messiah of the Jews, but he is also the *Saoshyant* of the Persians. Incidentally, the Avestic word *saoshyant*, literally "he who shall save", would be *sô-sont-* in Greek. In fact, the word *sao-shyant* is even etymologically related to the Greek word *sô-têr*, meaning "saviour", and this is a commonly used title of Jesus Christ.

Is it conceivable, that, due to special circumstances of an astronomical nature, the magi were motivated to undertake journeys in order to find the incarnation of their "saviour"? Unfortunately, extant Zoroastrian writings do not provide information on this matter. However, in the Middle-Persian text *Zand-i Vohuman Yasht* (chap. 3.15; 18), Ahura Mazda prophecies to Zoroaster, that in the future large armies would threaten the true religion. Then a prince would be born who would destroy these armies. The birth would be announced by

 $^{^{114}}$ = the famous Old-Indian *Soma*-juice that brought visionaries of old into contact with the gods.

¹¹⁵ Bundahishn, XXX,25.

¹¹⁶ The Lake is called *Harun* today and is situated in the province of *Sistan* in south-eastern Persia.

¹¹⁷ Greater Bundahishn XXXV.60; XXXIII,37; Denkard VII.10.15ff.; partly reprinted in: Mary Boyce, *Textual Sources for the Study of Zoroastrianism*, p. 90f.; vide also Mary Boyce, *A History of Zoroastrianism*, vol. I, p. 285.

a star. We shall look into this text further on. Unfortunately, a large number of Zoroastrian texts have been lost during the turmoil of history. The possibility cannot be excluded that prophecies existed in Jesus' time, stating that the birth of the Saoshyant would coincide with the appearance of a star.

The Redeemer Figure Mithras

The magi could theoretically also have been devotees of the cult of Mithras, a mystery cult exclusively for men, which had many adherents in the Roman Empire during the first centuries CE. Several emperors were devotees of Mithras and headed this religious group. Could it be that Matthew was alluding to Mithraic teachings?

Mithra¹¹⁸ was a very old god, revered by the Persians as well as the ancient Indians. When Zoroaster reformed the Old Persian religion, he declared Ahura Mazda, the "wise lord", to be the supreme and only god, though the other gods kept a status of holy, immortal beings. Ahura Mazda had an enemy, Angra Mainyu (= Ahriman), the embodiment of evil. In the worldview of Zoroastrians the two of them were locked in an eternal battle. Mithra obtained the role of the "judge of souls". Ahura Mazda had created Mithra as great and mighty as he was himself, comparable to the Son of God in Christianity. It was Mithra's task to fight demons and protect people who were good. His name means "covenant". And accordingly he watched over justice, the keeping of treaties and promises and about whether people were speaking the truth or lying.

There is, unfortunately, hardly any written evidence of the *Roman* cult of Mithras, and it is not known how much of the Persian teachings were taken over, or came from other sources. However, it is known that the cult of Mithras became a competitor to Christianity and that early Christian writers were outraged about the startling similarities between the teachings and rituals of Mithraism and Christianity, or regarded these similarities as a work of the devil.¹¹⁹ It seems that the early church adopted several of its rites and teachings from Mithraism.

In any case, it is clear that Mithras had the role of a redeemer. Whether or not he was perceived specifically in the context of the Zoroastrian prophecy of a redeemer is something about which one can only speculate until further sources of information are found. Older writers were of this opinion but

¹¹⁸ Depending on context, this author uses two different forms of the name of this god: *Mithra* is the Persian, *Mithras* the Roman form of the name.

¹¹⁹ Cf. for instance Justin Martyr, *Dialogue with Trypho* 78. It is hard to say who copied whom. Probably both religions took over content and form of older mystery cults.

newer ones are more careful in their assertions. That Mithras' most important deed was the sacrifice of a bull seems at first sight to be a validation of his role as *Saoshyant*, because by the sacrifice of a bull the *Saoshyant* is said to redeem humanity at the end of time. However, since Zoroastrian writings never mention Mithra as a killer of a bull, doubts are justified. However that may be, Matthew's story about the magi and the Star could have been intended as a polemic against Mithraism. Not Mithras but Jesus was the true redeemer.¹²⁰

There is a striking similarity between the birth of Mithras and that of Jesus. Mithras was born in a cave or from a rock, whereas Jesus was born in a stable. However, Bethlehem's stables were caves and, in the apocryphal Gospel of James, it is stated specifically that Jesus was born in a cave ($\sigma\pi\eta$ - $\lambda\alpha\iota\sigma\nu$). Is there a connection with Mithras' birth from a rock?

As a large number of similarities existed between Mithraism and Christianity, it raises the question whether there might have been a doctrine about a birth-star for Mithras. We have no direct sources for this. Nevertheless, it is plausible that there would have been a legend about a birth star of Mithras. Mithraic iconography is permeated with astrology. This shall be treated in detail further on.

In newer pseudo-scientific literature, and especially on the Internet, one frequently comes across the fable of the virgin-birth of Mithras. However, in reality, nothing like this has been recorded, not in Roman sources nor in oriental ones.¹²¹ From Roman depictions of Mithras and some inscriptions,

¹²⁰ Some authors compare the homage of the magi to the "new born king" with the homage of Tiridates I before Nero in Rome, in 66. Tiridates was the king of the Parthians and himself a *magus*. (Dio Cassius, *Historia Romana* 63,1-7; vide also Suetonius, *De vita caesarum*. *Nero* 13 and 30; Tacitus, *Annales* 16.23; Pliny, *Naturalis Historia* 30.6.16-17). Tiridates knelt down, lifted his hands and said:

σὸς δὲ δοῦλος (sc. εἰμί)[.] καὶ ἦλθον πρὸς σὲ προσκυνήσων σὲ τὸν ἐμὸν θεὸν ὡς καὶ τὸν Μίθραν, καὶ ἔσομαι τοῦτο ὃ τι ἂν σὺ κελεύσῃς[.] σὺ γάρ μοι καὶ μοῖρα εἶ καὶ τύχῃ.

[&]quot;I am your slave. I have come to you to worship you as my god, as I also worship Mithras, and I shall be whatever *you* command. For *you* are my fate and my destiny." (Dio Cassius, *Histora Romana*, 63,1-7).

Tiridates' conduct had the following background: Romans and Parthians had long fought in Armenia and they finally agreed that the Parthians would provide the king of Armenia, but the Roman emperor would crown him.

¹²¹ David Fingrut's assertions in an essay on the Internet titled "Mithraism. The Legacy of the Roman Empire's Final Pagan State Religion" seem very authentic at first reading. Fingrut writes: "Mithras was born of Anâhitâ, an immaculate virgin mother once worshipped as a fertility goddess before the hierarchical reformation. *Anâhitâ* was said to have conceived the redeemer from the seed of Zoroaster preserved in the waters of Lake Hamun in the Persian province of Sistan. Mithra's ascension to heaven was said to have occurred in 208 B.C., 64 years after his birth. Parthian

it is only known that Mithras was born from a rock, in a miraculous way. On the other hand, Zoroastrian sources seem to say nothing about a rock-birth for Mithra. According to these sources, he was created by Ahura Mazda. With such discrepancies, some have even supposed that the Roman cult of Mithras was actually a Roman invention and that it had almost nothing in common with the Zoroastrian cult of Mithra.

Priests in Search of Holy Children

It seems, therefore, that the magi were Persians or Mesopotamians. In order to gain an understanding of their actions and their way of thinking, however, it is useful to have a brief look at another people in the east, the Tibetans. Their priests, even today, and in a way similar to Matthew's magi, go looking for new-born spiritual leaders, and they often undertake long journeys, even to Europe or America, for this purpose. It is impossible, of course, for the "magi" to have been Tibetan Buddhists, because Buddhism came to Tibet only centuries later.¹²² Nevertheless, it seems to me that a closer look at what these lamas do could provide valuable insights that might help us understand the actions of the magi described in Matthew. Tibetan priests have practical experience in this sphere. So let them be asked.

When the spiritual head of certain sections of Tibetan Buddhism dies, it is customary for his deputies to begin searching for a new-born child in whom the one who died may be reincarnated. There are a considerable number of these *bodhisattvas* or *tulkus*, beings who, according to the Tibetan view, have "overcome" the world but who allow themselves to be reincarnated repeatedly. This provision is made out of compassion (karuna), in order to teach humans and to lead them to salvation. The present Dalai Lama, himself, is said

coins and documents bear a double date with this 64 year interval." These statements remind one strongly of the tradition of the virgin birth of the Saoshyant but clearly also deviate from it. This author took great trouble to trace this, unfortunately without success. In standard works on Mithraism and Zoroastrianism nothing was to be found on a virgin birth of Mithra. Finally, this author emailed Fingrut. He was *not* able to name sources for the statements he had made. vide e.g. Franz Cumont, *Textes et monuments figurés relatifs aux mystères de Mithra* (1899); idem, *Les Mystères de Mithra*, Brüssel (1913 (3)); Samuel Laeuchli, *Mithraism in Ostia: Mystery Religion and Christianity in the Ancient Port of Rome* (1967); Leroy Campbell, *Mithraic Iconography and Ideology* (1968); Mary Boyce, *A History of Zoroastrianism* (1975); Mary Boyce, *Zoroastrians. Their Religious Beliefs and Practices* (1979); Michael Speidel, *Mithras-Orion: Greek Hero and Roman Army God* (1980); Manfred Clauss, *Mithras. Kult und Mysterien* (1990); Reinhold Merkelbach, *Mithras. Ein persisch-römischer Mysterienkult* (1994).

¹²² If at all, they would probably have been lamas of the older Bön religion. It is also quite possible that Buddhists took over this practice, like many other things, from the Bönpos because it is not a tradition in other Buddhist countries.

to be the 14th incarnation of such a being. Of great importance to the Tibetans is the Karmapa who is also said to have returned already for the 17th time. There are numerous other tulkus, in the opinion of some Tibetans even *too* many; they are numbered in hundreds.

The search for a tulku does not follow a set pattern. Very disparate things can be signs. For example: predictions made by the person who died, dreams and visions of another tulku, messages from oracles, omens of all kinds such as rainbows, lightning and thunder, appearances in the heavens, unusual behaviour of animals and so on. For instance, before the 16th Karmapa died, he handed a talisman containing a letter to his favourite monk. The following lines gave information about the place where the reincarnation of the Karmapa would be found:

From here to the east of the snows there is a land where *holy thunder* sounds spontaneously. At a fruitful nomads' camp with the sign of the *cow* there are the *method Döndrub* and the *wisdom Lolaga*. Born *in the year of him who is needed for the earth,* with the far-reaching *magic sound of the white one:* this is the one who is called the Karmapa.¹²³

In retrospect, that is after the 17th Karmapa had been found, the text is explained as follows: The place of his birth is *Lhathok. Lha* means "divine" and *thok* means "thunder". However, the text uses the poetic expression for "thunder", *gnam chags*, thus it means "iron of the skies". The name of the group of nomads to which Karmapa was born is *Bakor*, and *ba* means "cow". However, the text uses *dodjo*, the customary term for "cow" in holy scriptures. "Method" indicates the father, and "wisdom" the mother. Döndrub and Lolaga are the names of the parents of the new Karmapa, apparently predicted correctly by the old Karmapa. And then there is an indication of the *time that* is also an *astrological* detail, as follows: According to Chinese astrology, the Karmapa was born in the year of the wooden ox (1985). The Ox is the one "needed for the earth", that is, the one pulling the plough. The "sound of the white one" refers to a magic appearance. It refers to the sound of a shell-horn which, allegedly, could be heard for an hour after the birth of the Karmapa.

This example was chosen because it contains an astrological or calendar detail and thus bears some resemblance to the search of the magi for the Christ-Child. This case is interesting for the present investigation because – and this statement is going to be central to this author's theory of the Star of Bethlehem – the Karmapa-Child is not searched for because of the astrological detail mentioned, but because of a prophecy in which the astrological detail simply functions as an indication of time. The astrological detail is

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¹²³ Jean-Paul Ribes, *Die Flucht des lebenden Buddha. Der 17. Karmapa und die Zukunft Tibets*, p. 106f.

only one of several, all of which together contribute to the identification of the child, and it is merely meant as an indication of the *time* of the birth.

Returning to the *magi*, it is quite possible that when they were looking for a holy child, they did not do this exclusively based on astrological considerations. On the one hand, they followed a Zoroastrian prophecy; on the other hand, as Matthew reports, they were following the Old Testament prophecy pointing to Bethlehem as the place of the Messiah's birth. Matthew reports further that they were also led by dreams. They were warned in a dream not to return to Herod but to return to their homeland, by another route. The fact that they were looking for a holy child in Palestine was not only for astrological reasons. Possibly, they were only following a prophecy or a dream such as the following: "Birth of the holy King of the Jews in Palestine at the next appearance of star X in the eastern morning sky." The prophecy of the birth of a *tulku* could certainly sound like this in the Tibetan context, too. The appearance of a star would be no more than a clue for the time of the birth.

Practically all writers about the Star of Bethlehem start from the premise that the star must have been a most unusual or rare phenomenon. That is not necessarily the case. Although details of the practices of the magi are not known, the details of the practices of the Tibetans give rise to the suspicion that it may be completely wrong to expect the unusual. Such views are also not supported by Matthew's text. Herod's ignorance and that of his own experts, indicated by the fact that he had to ask the magi about the time of the appearance of the star certainly shows that the heavenly phenomenon was inconspicuous. And, as is obvious from Matthew, prophecies, dreams and visions were important to magi. It is even likely that it was not the astrological reasons that were the cause of their journey but a combination of prophecies, visions, dreams, oracles and astrological considerations. Firstly, the Saoshvant had been prophesied by Zoroaster, and once they were on their journey, the magi were advised by other wise people, namely the scribes of Herod, on how they were to continue their search. Not only the star, and dreams and visions, but particularly the ancient prophecy, all played a part in their search. The astronomical or astrological detail possibly served merely as an indication of time, within a time frame that was not necessarily very large.

The Prophecy of Daniel

Jewish scholars repeatedly tried to predict the date of the coming of the Messiah based on biblical prophecies. In particular, during times of great historical changes or during times when Jews were persecuted, they hoped the Messiah would come soon, would put an end to the hardship and install the Kingdom of God.¹²⁴ The history of these prophecies is also interesting

¹²⁴ Silver, A History of Messianic Speculation in Israel, pp. 16-19.

for the current investigation, because it seems that the *magi* also "foresaw" and expected the birth of the Messiah. As has been shown, Matthew could have been thinking of *Jewish magi* coming from Babylon.

It is known that in the 1^{st} and 2^{nd} centuries CE, many Jews believed that the coming of the Messiah was imminent. An impressive testimony is given by the Roman historian Tacitus, who writes about the conquest of Jerusalem and the destruction of its temple by the Romans in 70 CE:

Evenerant prodigia, quae neque hostiis neque votis piare fas habet gens superstitioni obnoxia, religionibus adversa.

Sinister portents had occurred, where this people, which is addicted to superstition and hostile to religious rites, has no possibility provided for by divine order to appease them by sacrifices or votive offerings.

Visae per caelum concurrere acies, rutilantia arma, et subito nubium igne conlucere templum.

Blades and reddish weapons were seen running together through the sky, and suddenly, the temple [was seen] illuminated by a fire of clouds.

Exapertae repente delubri fores, et audita major humana vox, excedere deos; simul ingens motus excedentium.

Suddenly, the doors of the sanctuary allegedly stood open, and a superhuman voice was heard saying that the gods were leaving. At the same time, a huge movement of the leaving [gods was seen or heard].

Quae pauci in metum trahebant: pluribus persuasio inerat antiquis sacerdotum litteris contineri, eo ipso tempore fore ut valesceret Oriens, profectique Judaea rerum potirentur.

A few [people] linked these things with fears; however most were convinced that the ancient writings of the priests contained [the prediction] that right at that time it would happen that the orient would become strong and they would succeed in taking power over [all] things through Judaea.

Quae ambages Vespasianum ac Titum praedixerat: sed volgus, more humanae cupidinis, sibi tantam fatorum magnitudinem interpretati, ne adversis quidem ad vera mutabantur.

This ambiguous Omen had predicted Vespasian and (his son) Titus; however, the people, in the way of human desire, interpreted this greatness of destinies as referring to themselves, and not even through adverse occurrences could they be lead to [an understanding of] the truth.¹²⁵

The text indicates that the prediction mentioned was found in the Old Testament. Most likely it was the prophecy of Daniel, as is also confirmed by Josephus Flavius¹²⁶, more exactly, Daniel 9:24-27. According to a current interpretation of the text, it refers to the appearance of the Messiah, his execution, and the destruction of Jerusalem and its temple. In hindsight, Jews

¹²⁵ Tacitus, *Historiae* V.13; cf. Suetonius, *De vita caesarum, Vespasianus*, 4; Josephus Flavius, *De bello Iudaico*, VI,5,4.

¹²⁶ Josephus Flavius, Antiquitates Iudaicae X,11,7.

linked these events with the year 70 CE, when Vespasian and his son Titus conquered Jerusalem and destroyed the temple. Christians, however, believe that the text predicts the appearance and crucifixion of Jesus. Daniel even gives precise, although difficult to interpret, clues about the time when these things would happen. This author translates the text as follows, trying to do justice to grammatical correctness in the first line, not to the possibility of applying the prophecy to Jesus:

24 שֶׁבַעִים שֶׁבְעִים נֶחְמַךְ עַל־עַמְך וְעַל־עִיר קַדְשֶׁךְ לְכַלֵּא הַפָּשֵׁע וּלְהָתֵם חַטָּאת וּלְכַפֵּר עֵוֹן וּלְהָבִיא צֵדֵק עֹלְמִים וְלַחָתִם חַזוֹן וְנַבִיא וְלָמְשׁחַ קֹדֵשׁ קַדְשִׁים.

(24) Seventy weeks have been decreed for your people and for the city of your sanctuary, in order to prevent the transgression and to correct the sin and atome for the iniquity and to bring in everlasting righteousness and to seal vision and prophecy and to anoint the Holy of Holies.

25 וְתַדַע וְתַשְׂבֵּל מָן מֹצָא דָבָר לְהָשִׁיב וְלְבְנוֹת יְרוּשֶׁלִם עַד מָשִׁיחַ נָגִיד שֶׁבַעִים 25 שְׁבָעִים שְׁשֵׁבוּ וְהָבוּה רָחוֹב וְחָרוּץ וּבְצוֹק הָעָתִים. שִׁבְעַים שָׁשִׁים וּשְׁנַיִם תָּשוּב וְנִבְנָתָה רְחוֹב וְחָרוּץ וּבְצוֹק הָעָתִים.

(25) And know and understand: From the issuing of the word (or: command) to rebuild Jerusalem until an anointed one (or: a messiah), a ruler, [there are] seven weeks. And [for] 62 weeks, [Jerusalem] will be rebuilt with streets and moat, and in troublesome times.

26 וְאַחֲרִי הַשְּׁבֵעִים שְׁשִׁים וּשְׁנִים יִכָּרֵת מָשִׁים וְאֵין לוֹ וְהָעִיר וְהַלְּדֶשׁ יַשְׁחִית עַם נַגִּיד הַבָּא וְקַצוֹ בַשְׁטֵף וְעַד קֵץ מְלַחַמַה נֵחַרֵצֶת שׁמֵמוֹת.

(26) And after 62 weeks, an anointed one (or: a messiah) will be cut off, and he will have no (guilt?)¹²⁷. And the people of the ruler who is to come will destroy the city and the sanctuary. And his (or: its) end will be through the flood. And until the end there will be war and punishment¹²⁸ through devastations.

27 וְהָגְבִּיר בְּרִית לָרַבִּים שָׁבוּעַ אֶחָד וַחָצִי הַשָּׁבוּעַ יַשְׁבִּית זֶבַח וּמִנְחָה וְעַל כְּנַף שִׁקוּצִים מִשׁמֵם ועַד-כַּלָה וְנָחֵרַצַה הַתּּהַ עַל-שׁמֵם.

(27) And he will make firm a covenant for the many for one week; and in the middle of the week, he will end sacrifices and food offering. And on the wing of abominations, a devastator will [come], namely until destruction and decreed [punishment]¹²⁹ will be poured out over the devastating one.

(In the Septuagint, the last sentence is rendered as follows:)

¹²⁷ The exact meaning of , "he hasn't", "there isn't for him", is debated.Some render it as "and not for himself". The two Greek versions have: οὐκ ἔσται, "he/it will not be", and: κρίμα οὐκ ἔστιν ἕν αὐτῷ, "there will be no guilt/ judgement in him".

¹²⁸ Practically all translations render נְחֵרְצֶת with "the decreed".

¹²⁹ Practically all translations render כָּלָה וְנָחֵרְצָה with "decreed destruction" or similar. However, this is not possible because of the י. *Young's Literal Translation* is more correct here: "even till the consummation, and that which is determined is poured on the desolate one".

καὶ ἐπὶ τὸ ἱερὸν βδέλυγμα τῶν ἐρημώσεων ἔσται ἕως συντελείας, καὶ συντέλεια δοθήσεται ἐπὶ τὴν ἐρήμωσιν.

And on the temple, an abomination (: an idol) of the devastations will be until the complete destruction; and complete destruction will be given until devastation. (Daniel 9,24-27)

There is talk of "70 weeks", reckoned from an edict of a Persian king by which he commanded the rebuilding of Jerusalem and its temple. Both Christian and Jewish traditions agree that the 70 "weeks" must be so-called "year weeks" or heptads, i.e. time units of seven years each, so that one arrives at a total of 7 x 70 = 490 years. However, the exact date of the edict is controversial. The Bible states in several places that Cyrus the Great, when he allowed the Jews to return home from their Babylonian exile in 538 BCE, also told them to rebuild Jerusalem and its temple.¹³⁰ Otherwise, Daniel could refer to an edict of Darius in 521 BCE, where he confirmed the earlier edict of Cyrus and commanded that the rebuilding should be brought forward. Five years later, in 516 BCE, the temple was consecrated and the temple service begun.¹³¹

However, some believe that the prophecy fits better with Jesus' appearance as Messiah if 490 years of 360 days each are counted from an edict of King Artaxerxes, who in 445 BCE instructed the prophet Nehemiah to maintain Jerusalem, which apparently was in a desolate state.¹³² However, by this time, the temple had long been completed and was in operation.¹³³ So did the edict refer to other works?

Whatever solution one prefers, it is obvious that the 490 years *very roughly* ended in the time of Jesus. It is quite understandable that Daniel's prophecy provoked great expectations in that epoch. Since a reliable historical chronology was not available, the period of time within which the great events were to be expected was even considerably extended.

In any case, Suetonius and Josephus Flavius testify that Jews believed that Daniel's prophecy was fulfilled in 70 CE, when the Romans conquered Jerusalem and destroyed the temple.¹³⁴ The appearance of the Messiah was expected shortly after these events. Unfortunately, this expectation was disappointed. However, the interpretation of Daniel 9:24-27 was still considered valid. Isaac Abravanel, who lived around 1500 CE, still calculated the "70 weeks" as 70 x 7 = 490 years, and he believed that it referred to the period

¹³⁰ 2. Chronicle 36:22f.; Ezra 1:1-4; 6,1-5; Isaiah 44:28; 45:13.

¹³¹ Ezra 6:6-15, in the 1st and 6th year of Darius.

¹³² Nehemiah 2:1-6, where the 20th year of Artaxerxes is mentioned.

¹³³ In the edict of Artaxerxes, there is no mention of a rebuilding of the temple. Moreover, it is stated that Artaxerxes generously supported the temple already 13 years earlier, in 458 BCE. (Ezra 7, in the 7th year of Artaxerxes.)

¹³⁴ Tacitus, *Historiae* V.13; Sueton, *De vita caesarum, Vespasianus*, 4; Josephus Flavius, *De bello Iudaico*, VI,5,4.

of time from the destruction of the first temple of Jerusalem to the destruction of the second temple in 70 CE.¹³⁵ Nevertheless, Abravanel expected the Messiah in his own time, around the year 1500 CE.

However, the prophecy of Daniel predicts the coming of "a messiah" already within the 490 years, and his being "cut off" already *before* or at the same time as the destruction of Jerusalem and the temple. Christian authors therefore considered the prophecy of Daniel a proof that the expected Messiah was Jesus and that the Jews had "missed" him. And indeed, as has been shown, Jews in Jesus' time expected the Messiah *in their time* or in the near future, and some of them believed that it was Jesus. Even Jesus himself understood his own mission in the context of the prophecy of Daniel (Matthew 24:15).

Unfortunately, the true sense of Daniel 9:24-27 as well as its historical interpretation are highly controversial. The discussion is also hampered by the fact that the Septuagint and almost all Christian translations do not render the Hebrew original correctly. Firstly, Daniel does not talk of "*the* Messiah", but of "*a* messiah", and he does so even twice. The definite article "the" (\cdot_{7}) is not used in the text, neither with the "ruler". Here, it must be understood that for the ancient Israelites the word "messiah" meant nothing but an "anointed" ruler of Israel, who was chosen by their god. E.g. the kings Saul¹³⁶ and David¹³⁷ were called the "messiah" ("anointed one") of God. Isaiah states that even the Persian king Cyrus, who conquered Babylon and released the Jews from the exile, was considered the "messiah" of God. (Isaiah 45:1). Later, the high priest of Jerusalem was given the title of "messiah". It follows that Daniel does *not* necessarily refer to *the* Messiah who was believed to bring the everlasting "Kingdom of God", but could refer to any king or spiritual leader of Israel.

Secondly, the verses 9:25-26, as they were translated above, indicate that already after 7 heptads or 49 years, "a messiah" would come, and that after another 62 heptads or 434 years, "a messiah" would be killed. Thus, it seems that there is talk of *two* messiahs who would be separated by a time distance of 400 years. This interpretation is also supported by scientific Biblical philology.¹³⁸

¹³⁵ Abravanel, מעיני הישועה ("The Sources of Salvation"), 10 (Hebrew). Cf. Silver, *A History of Messianic Speculation in Israel*, pp. 121f.

¹³⁶ 1 Samuel 12:3; 24:7; 26:23; 2 Samuel 1:14.

¹³⁷ 1 Samuel 16:13; 2 Samuel 22:51-23:1; 1 Chronicle 11:3; Psalm 89:21; Psalm 132:17. In 1 Kings 1:39 and 1 Chronicle 29:22, Solomon is anointed as the king, however he is never called "the messiah of God".

¹³⁸ It is assumed that the second messiah who was "cut off" was the last high priest Onias III, who was killed in 171 BCE, when the Seleucid king Antiochus IV Epiphanes conquered Jerusalem. Other details in Daniel's description also seem to accord with contemporary occurrences: Antiochus allied himself with Hellenistic Jews, and this alliance lasted for about three years. He descerated the temple by looting it repeatedly

Only the minority of translations have chosen this correct interpretation of the text.¹³⁹ The Septuagint and most Christian translations chose a reading where the text seemed to refer to *one single* Messiah. However, if one wants it to refer to *the* Messiah, Daniel's original text must be "corrected" in three places and the definite article "the" ($\cdot_{\overline{o}}$) added. Furthermore, verse 25 must be construed in a different way. What results is a clumsy and unnatural reading; however, this was generously overlooked in religious fervour:

25 ... מן מֹצָא דָבָר לְהָשִׁיב וְלְבְנוֹת יְרוּשָׁלַם עַד מָשִׁיחַ נָגִיד שָׁבֵעִים שָׁבְעָה (גִיד שָׁבֵעִים שָׁבְעָה יַן מַבַּעִים שָׁבָעַים שָׁבָעַים שָׁשָׁים וּשְׁנַיֵם תָּשׁוּב וְנִבְנָתָה רְחוֹב וְחָרוּץ ...

(25) ... From the issuing of the word (or: command) to rebuild Jerusalem until <u>the</u> anointed one (or: <u>the</u> messiah), <u>the</u> ruler, [there are] seven week<u>s and</u> 62 week<u>s</u>. [Jerusalem] will be rebuilt [in 7 weeks] with streets and moat ...

... וְאָחֵרֵי הַשֶּׁבֵעִים שִׁשִׁים וּשְׁנַיִם יִכָּרֵת מֲשִׁיחַ

(26) And after 62 weeks, the messiah will be cut off ...

Using this linguistically unnatural reading, *the* Messiah could be expected after 69 (= 62+7) heptads or 483 years, thus roughly in the epoch of Jesus. Church Father Tertullian ($2^{nd}/3^{rd}$ cent. CE) calculated that from the inauguration of Darius (522 BCE) until the 41^{st} year of Augustus (3 BCE), which he considered the birth year of Jesus, there were $62^{1/2}$ heptads or $437^{1/2}$ years. In addition, there were another $7\frac{1}{2}$ heptads or $52^{1/2}$ years until the submission of the Jews and the destruction of the temple in the 1^{st} year of Emperor Vespasian (70 CE).¹⁴⁰ Of course, this interpretation does not do justice either to the exact historical chronology, or to the wording of Daniel's prophecy. A different interpretation was proposed by Julius Africanus, a contemporary of Tertullian. He calculated 490 *lunar* years without intercalary months (=

and by finally making it a temple of Zeus and erecting a statue of Zeus in it. Furthermore, he forbade Jewish sacrifices and the Sabbath, thereby provoking the so-called Maccabean Revolt, which began in 167 BCE and lasted for several years. In 163 BCE, about a heptad after the death of Onias, the temple was reconstructed and a new independent Jewish kingdom was founded, which endured for about 100 years. It is assumed that the Book of Daniel was written in this epoch and refers to these occurrences. Although Daniel's chronology is not completely consistent with the edicts of the Persian kings, it can be argued that he may not have had precise historical records. Also, it is interesting that the period of time the Holy Land was occupied by pagan rulers lasted from 605 through 171 BCE and thus covered 434 years or 62 heptads. And from the fall of Jerusalem in 587 BCE until her liberation by the "messiah" Cyrus in 438 BCE, there are 49 years, which are 7 heptads. Are these only coincidences?

¹³⁹ The *Revised Standard Edition*, the *New Revised Standard Version*, the *Common English Bible*, the *English Standard Version*, the *New American Bible (revised edition)* and the translation of the *Jewish Publication Society of America* of 1912. A mixture of both readings is chosen by the *Complete Jewish Bible*.

¹⁴⁰ Tertullian, Adversus Iudaeos, chap. 8.
475 solar years) from the 20^{th} year of Artaxerxes (445 BCE), in which the restoration of Jerusalem was decreed, and arrived in the 16^{th} year of Tiberius (30 CE), in which he assumed the crucifixion and resurrection of Christ.¹⁴¹

Until this day, Christians try to prove that Daniel's prophecy refers to Jesus, e.g. Werner Papke in his book on the Star of Bethlehem.¹⁴² Papke also sets out from Nehemiah and the month of Nisan of the 20th year Artaxerxes (March 445 BCE). He interprets the "69 weeks" as year weeks of "prophetic years" of 360 days each.¹⁴³ From this, he calculates a period of time of 69 x 7 x 360 = 173'880 days. These he reckons from March 445 BCE and arrives in April 32 CE. In this month, he believes that Jesus entered Jerusalem riding on a donkey and was greeted by the people as the King of Israel. This calculation seems to fit pretty well, since Jesus was crucified soon thereafter. However, Papke does not explain, and in fact does not even mention, the final week and the total time of 70 weeks. Nor does he mention the problem that after the crucifixion there were another 5 year weeks until the destruction of the temple that are not mentioned by Daniel.¹⁴⁴

For the current investigation, it is irrelevant which interpretation of Daniel's prophecy is exactly correct. What is important is the fact that since antiquity, Christians as well as Jews were of the opinion that the 70 year weeks of Daniel 9 pointed to the 1st century BCE or CE. There can be no doubt that speculations about the imminent coming of the Messiah were already made in the time of Jesus. In fact, Jesus himself must have considered himself to be the Messiah prophesied in Daniel 9. And he was recognised as the same by his followers. Jesus even expressly refers to Daniel 9:27 in Matthew 24:15.

It is thus very plausible that the "70 weeks" were interpreted as year weeks and that the Messiah was expected roughly in the time of Jesus. However, if so, then the knowledge of the magi about the coming of the Messiah was not indicated by the mere appearance of a star. The rough time frame within

¹⁴¹ Julius Africanus, *Chronographia*, V, according to Eusebius of Caesarea in PG 22,609ff.

¹⁴² Papke, Das Zeichen des Messias, pp. 60-74.

¹⁴³ The "prophetic year" of 360 days results from the "1260 days" of Rev. 11:3 and 12:6, which in the context (11:2 and 12:14) are explained as "a time and times and half a time" or $3\frac{1}{2}$ years or half a year week, as well as "42 months" of 30 days each. Whether or not Daniel's years should be interpreted like this, is uncertain.

¹⁴⁴ The problem of the 70th year week is often "solved" by the assumption that there is a great period of unknown length between the end of the 69th and the beginning of the 70th year week. This period is assumed to have begun with Jesus' entry into Jerusalem and still not to have ended today. The 70th year week would thus still lie in the future. However, this is not a plausible explanation of the text. When there is talk of a timespan of 70 year weeks, then one would naturally think that they have to be counted without an interruption. Otherwise, the time frame given would be completely useless.

which the birth had to take place was predefined by a prophecy. The Messiah probably had to be born 30 or 40 years before his public appearance. In order to determine the exact moment of his birth, astrologers just had to search for a symbolically fitting astrological configuration within the predefined time span, be it a Jupiter-Saturn conjunction, as some believe, or the heliacal rising of Venus, as this author believes.

The above considerations have led the present investigation to the following important conclusion: The birth of the Messiah at a particular moment was not expected because of the appearance of a star, but because of a prophecy, which mainly consisted of non-astrological clues, such as years counted from some known event. Although the birth star was also prophesied, this clue was neither complete nor sufficient information. The star thus did not necessarily convey the unequivocal message: "birth of a holy king in Israel". Nor did it have to be an extraordinary or extremely spectacular or rare phenomenon. It was sufficient that the rising star had some symbolical astrological connection with the Messiah and provided him a fitting natal horoscope.

When in the subsequent centuries, Jewish scholars tried to calculate the coming of the Messiah, they usually set out from the prophecy of Daniel. Astrological points of view played only a minor role. However, if some calculated date coincided with a prominent astrological event, then this was considered a confirmation. Under the influence of Persian and Arabic astrology, the expected appearance of the Messiah was mostly linked with Jupiter-Saturn conjunctions. E.g., around the year 900 CE, the Jewish scholar Saadia Gaon polemicised against colleagues, who expected the Messiah during the Jupiter-Saturn conjunction of the year 968. In the 12th century, Moses ben Maimon notes that some of his contemporaries expected the Messiah during the super-conjunction of all planets in the year 1186. Abraham bar Hiyya and Isaac Abravanel calculated the coming of the Messiah for the Jupiter-Saturn conjunction of the year 1463. Their theories will be studied later in detail. However, it has always been the prophecies of Daniel that played the main role in such attempts, not astrological considerations. Furthermore, it has been noted already that the astrological configurations did not necessarily have to be spectacular or unique. In the first place, they had to fall into the rough time frame that was predefined by the prophecy. Although the chosen Jupiter-Saturn conjunctions may have been astrologically studied and interpreted, it is obvious from history that in several epochs when the Messiah was expected, conjunctions of Jupiter and Saturn were considered good enough to indicate the Messiah, quite independently of the other details of the then celestial configuration.

An exceptional, spectacular phenomenon?

The result of the preceding chapters is supported by the apocryphal Arabic Infancy Gospel, which asserts that the *magi* came to Jerusalem *because of a prophecy of Zoroaster and not because of a star:*

وكان لما اتلد الرب يسوع في بيت لحم يهودا على عهد ايروديس الملك اذ مجوس رافوا من المشرق الى يروشليم <u>كما تنبا زرادشت</u> وكان معهم القرابين الذهب واللبان والمرر ... وفي تلك الساعة ظهر لهم ملاك شبه الكوكب الذي كان دليلهم او لا فمضوا مهتدين بنوره حتى وصلوا بلادهم

When the Lord Jesus was born in Bethlehem in Judaea at the time of King Herod, *magi* came from the orient to Jerusalem, *as had been prophesied by Zoroaster*.¹⁴⁵ And they brought gold, frankincense, and myrrh with them as offerings. ... And in that moment, an angel appeared (or: rose) to them, which resembled the star that had previously been their guide (or: sign). And they pulled away, led by its light, until they arrived in their country.¹⁴⁶

Even if such a prophecy does not appear to exist in the preserved Zoroastrian writings, it remains interesting to learn that, according to this text, it is definitely not the star that showed them the way but rather a *prophecy* in which, however, a star played a part.

To date, *all* researchers into the Star of the Messiah's birth have been looking for an unusual celestial phenomenon or atypical astrological occurrences, and thus have become the victims of a misunderstanding of what ancient astrology claimed to be able to do. In the *Centiloquium*, a text attributed to Ptolemy, it states at the outset that the astrologer could only make general, not concrete, statements and that concrete statements are assumptions at best. Genuine precognition of concrete events was only possible for those directly "inspired by the god".¹⁴⁷ The Babylonian astrologers, too, did not believe in

¹⁴⁵ Strictly speaking, the text might not mean that Zoroaster prophesied the coming of the *magi*, but the birth of the child.

¹⁴⁶ Thilo, *Codex apocryphus Novi Testamenti*, vol. 1, p. 70; vgl. Peeters, *Évangiles apocryphes*, vol. II, "Le livre des miracles de Notre-Seigneur, maitre et sauveur Jésus-Christ, lequel livre est appelé « L'évangile de l'enfance »", chap. 7, p. 9; transl. D.K.

¹⁴⁷ Ptolemy, *Centiloquium (Karpos)*, 1:

Άπὸ σοῦ καὶ ἀπὸ τῆς ἐπιστήμης οὐ γάρ ἐστι δυνατὸν τῷ ἐπιστήμονι τὰς μερικὰς ἰδέας τῶν πραγμάτων ἀναγγεῖλαι, ὥσπερ οὐδὲ ἡ αἴσθησις δέχεται τὴν μερικὴν ἰδέαν τοῦ αἰσθητοῦ ἀλλὰ τινα γενικήν. καὶ δεῖ τὸν μετιόντα καταστοχάζεσθαι τῶν πραγμάτων· μόνοι γὰρ οἱ ἐνθουσιῶντες προλέγουσι καὶ τὰ μερικά.

[&]quot;It is impossible for a sensible [astrologer] to proclaim the concrete forms of things [only] from yourself [as client] and from science – just like perception also does not grasp a concrete, but a general form of the matter perceived; and whosoever wants to investigate [concrete] things, has to use conjecture. Only those who are inspired by the god are able to predict concrete things."

conclusive predictions. Although they did predict concrete events for certain celestial configurations, they still did not consider these predictions to be conclusive. They only saw them as a warning from the gods or as signs for possible advantageous events. By magical practices, one could react to every omen or celestial phenomenon in order to avert threatening dangers or to further good prospects.

Thus, it is improbable that an astrological configuration alone would have motivated astrologers to make a prediction about the birth of a king and to make an arduous journey from Persia or Babylon to Palestine.

Therefore, the following conclusions can be drawn:

- 1. The star did not have to be an extraordinary or atypical phenomenon. Matthew, himself, does not allow for doubts about this. For when the magi spoke about the appearance of the star in Jerusalem, Herod knew nothing about it and had to have the phenomenon explained to him. The star described by Matthew did not apparently cause the slightest sensation. Some writers have concluded that the star was invisible apparently when the magi arrived in Jerusalem and only later became visible once more. Even if this were the case (but Matthew says nothing like this) Herod would not have had the magi called if it had been a *noticeable* celestial phenomenon, to ask after the time of the star's appearance. He would have known about it himself or he could have asked an advisor.
- 2. The "star" also need not have been a rare and extraordinary *astrological* configuration. Such a configuration might not have been noticed by laymen and Herod's inquiry would thus be understandable. And yet, if according to prevailing astrological doctrines the configuration had pointed unequivocally to the birth of a Messiah in Palestine, astrologers would not just have come from Persia but they would have come from *the entire* ancient world.
- 3. If, then, the star forms only part of a prophecy, it could relate also to quite a normal star. If a great magician or the head of a religious community, for instance, had dreamt that a redeemer would be born in Israel at the next appearance of Jupiter or Venus, in the morning sky, this would in itself already have been cause enough for a journey to Palestine. Even today, in the search of Tibetan lamas for their *tulkus* such a process would be conceivable.

These things do not necessarily have to have happened exactly like this. Possibly the Christ Child was never visited by magi. It is important to know, though, what *would have* motivated the magi and caused them to act the way they did *if* they had been looking for the new-born *Saoshyant* or Messiah. *This knowledge* is the background to the way Matthew tells the story, and it is indispensable for a correct understanding of it.

It is clear now that these reflections open completely new doors for the search of the Star of the Messiah. As in the case of the year of the ox concerning

the Karmapa, which is nothing extraordinary in itself (it comes about every twelve years), the Star of the Messiah could be the appearance of an ordinary star. Almost all stars disappear once a year in the western evening sky and reappear again some time later in the eastern morning sky. If, therefore, it could be found out which star is referred to, only a few days in the period between 7 and 1 BCE would qualify for the birth of Jesus. And if one were to trust the previous conclusion that Jesus was probably born in the years 3 or 2 BCE, only one or two dates need to be considered.

Summary

The original text of Matthew states that the three "kings" or "wise men" who came to see the baby Jesus were actually so-called "magicians" (magoi), i.e. experts in astrology, dream interpretation, prophecy, and sacred writings, who came from some country in the east. It is also likely that they were experts in magic and knew how to perform magical rituals and invocations. The identity of their country cannot be determined with certainty. Although the term *magoi* originally referred to members of the Zoroastrian religion, magoi could be found all over the ancient world since the Achaemenid Empire, and they were not even necessarily of Persian nationality. An impressive example of this is given in Acts 13:6ff., where a Jewish magos of the name of Bar Jesus is mentioned, who lived in Cyprus. Matthew's magoi could have come from any country east of Judaea, from Jordan, from Persia, or from Babylon. Still, it is quite likely that Matthew thought of Babylonia. His magoi were experts in astrology, and Babylon was the original homeland of astrology and astral religion. Furthermore, it is known that since the conquest of Babylon by Cyrus, a great number of magoi were present in the city, as well as a great number of Jews, who had never returned from the Babylonian exile. It is thus possible that Matthew thought of Jewish magoi from Babylon, who came searching for the new-born Messiah.

Matthew's *magi* obviously behave like astrologers. This may be hard to accept for Theologians and believing Christians, because the Bible in other places considers astrology to be a religious service dedicated to astral deities (so-called astrolatry) and therefore forbids it. However, Matthew's text leaves no room for doubt. According to him, Jesus was born around the time a star appeared in the east. The heliacal rising of a star was of great importance in ancient astrology. Whether Matthew's astrologers were Greeks, Egyptians, Persians, Jews, or Babylonians, is hard to decide. In the Hellenistic world, all traditions of astrology were closely related with each other.

The *magi* were not only astrologers, they were also adherents of a particular religious doctrine that was shared by both Jews and Zoroastrians. Both yearningly expected the birth of a great prophet, who would set the world in order and save the pious people from their hardship. The Jews called him the "Messiah", the Persians the "Saoshyant".

Most important for the current investigation is the conclusion that a religious prophecy plays an important part. The birth of the Messiah or the Saoshyant was not expected based on astrological considerations, but in the first place because of ancient prophecies that formed part of their religious traditions and sacred writings. Jewish scholars repeatedly tried to calculate the time of the coming of the Messiah, based on the clues given by the prophet Daniel. Astrological considerations played a minor part in these attempts. Although the Balaam prophecy of the "Star out of Jacob" (Numbers 24:17) seemed to require that the birth of the Messiah coincided with the appearance of a star, this star was only one of several clues given, and for exactly this reason, it did not have to be an extraordinary, extremely rare, and evecatching phenomenon. The method used by Jewish scholars was as follows: Based on biblical prophecies, they first tried to calculate the approximate time frame of the birth. In Jesus' time, they would most probably have used the prophecy of Daniel 9:24-27. In order to determine more precisely the date of the coming of the Messiah, they could have investigated which astrological (or astronomical) event would have been symbolically adequate and would have fallen into the time frame. The question how often comparable astronomical events would recur or how eve-catching it was, did not play any part in this kind of work. Since the 10th century, the coming of the Messiah was several times predicted for a Jupiter-Saturn conjunction, because the Persian and Arabic astrology of history assigns great importance to the cycles of these two planets. However, in extant works of Hellenistic astrology, Jupiter-Saturn cycles do not play a part. The magi would more likely have observed heliacal risings of a planet or a star that had a symbolical connection with the Messiah. A good example would have been the heliacal rising of Venus (cf. Rev. 22:16).

The Star in its Rising

Methodological Considerations

For the further investigation of the Star of Bethlehem and the *magi*, the following possibilities must be taken into consideration:

- 1) It is possible that Matthew's text reports an *unusual and very rare celestial phenomenon* of whatever kind whose symbolism unequivocally points to the birth of a Messiah or Saoshyant.
- 2) However, instead of an *unusual* astronomical phenomenon, a special astrological configuration could perhaps have been enough for Mesopotamian astronomers to assume that a kind of "Messiah" had been born. This phenomenon could have been relatively inconspicuous for laymen in astrology.
- 3) However, such a supposition is not necessary either. The star could refer to a very *ordinary* celestial phenomenon functioning as a mere indication of *time within the framework of a Jewish or Zoroastrian prophecy or both.* Other clues like dreams, visions and oracles, apart from the celestial phenomena, could have contributed to the identification of a Messiah.

Up to now writers have followed track 1) and 2) well enough but with questionable outcomes. With reference to considerations in the last few chapters, it seems that track 3) is the most plausible and that is what this author has decided to follow.

Using this approach, it is clear that one does not even have to consider the visit of the *magi* to the new-born Jesus to be a historical fact. Perhaps the Gospel writer Matthew only had the information about the birth horoscope of Jesus for reference, and the story of the *magi* was his free invention to complement what had been handed down to him. We need not even rely on the assumption that the birth of Jesus actually coincided with the appearance of the mentioned star. It could have been a mere myth, too. Nevertheless, the question of what kind of astronomical phenomenon it was remains interesting and important for the history of Christian religion.

Heliacal Rising

Let us now give attention to the astronomical hints in the report of the Star of the Messiah. The magi ask:

ποῦ ἐστιν ὁ τεχθεὶς βασιλεὺς τῶν Ἰουδαίων; εἴδομεν γὰρ αὐτοῦ τὸν ἀστέρα ἐν τῆ ἀνατολῆ.

The New American Standard Bible renders this verse:

Where is He who has been born King of the Jews? For we saw His star in the east and have come to worship Him. (Matthew 2:2)

And in verse 9 it says:

Καὶ ἰδοὺ ὁ ἀστήρ, ὃν εἶδον ἐν τῇ ἀνατολῇ, προῆγεν αὐτοὺς...

And the star, which they had seen in the east, went on before them...

These verses have generally been understood to mean that the magi were in the east, the "orient", when they saw the star. Thus the New International Reader's Version translates:

They asked, "Where is the child who has been born to be king of the Jews? *When we were in the east*, we saw his star. Now we have come to worship him." (emphasis D.K.)

However, *anatolê*, which is here translated as "east", and which one could really also translate as "orient", literally means "rising". There is no reason for not translating the word like that. Several English Bible translations do, in fact, do just that:

Where is He Who has been born King of the Jews? For we have seen His star in the east *at its rising* and have come to worship Him. (Amplified Bible)

Where is he who has been born king of the Jews? For we saw his star *when it rose* and have come to worship him. (English Standard Version)

Anatolê is the usual expression for the rising of the Sun, the Moon, or a star. For this reason, "rising", specifically in connection with stars, would be the most obvious and natural translation. In fact, it might even be wrong to translate anatolê as "Orient", because it is used in singular, whereas it would rather have to be in plural in order to refer to an eastern country or the "Orient". In the New Testament as well as the Septuagint, the word anatole is always used in plural where it refers to the "Orient", never in singular. For anatole in singular, on the other hand, the meaning "rising" is well attested. In verse 1, the magi are said to come apo anatolôn in plural, literally "from the risings", that is "from the direction of sunrises", thus "from the east, the Orient". The meaning "Orient" derives from the fact that the Sun rises in the east and the daybreak comes from eastern direction. The word "Orient" itself is derived from the Latin oriri "to rise, to emerge". The word "Anatolia" is also derived from Greek anatolê and means nothing more but "land of sunrise". On the other hand, in verses 2 and 9, the star is seen "in its rising", en tē anatolē, where anatolē is used in singular.

The translation: "we have seen his star in (at) its rising" is thus to be preferred, and it is not at all certain that the magi were in the "orient" when they saw the star. It only says that they *saw it rising in the east*. It is quite possible that they had already arrived in Palestine when they saw it rise. It shall be seen later that there are good reasons for such an interpretation of the text, even though it contradicts traditional exegesis.

Translated in this way, the text yields more astronomical information too. The first morning (heliacal) *appearance* of a star, after a time of its being invisible, called for special attention from Mesopotamian and Egyptian priests versed in astronomy. In the course of a year, most stars disappear once in the western evening sky and appear again after a few weeks in the eastern morning sky. In the interim, they are passed by the Sun and are outshone by its light so that they are not visible. The reappearance of a star in the east is called the "heliacal" rising, that is, rising "with the Sun". A star always makes its heliacal rising just before sunrise or just before daylight becomes so bright that it outshines the stars. If one wants to observe a heliacal rising, one always has to get up before sunrise and watch which star is the last to make an appearance before the stars disappear in daylight. Such a star will then rise a little earlier every day, and it will be easier to see. Two weeks later, it will already be visible before dawn.

As has been said, such first appearances in the morning or heliacal risings played an important part in ancient astrology, especially the heliacal rising *of planets*. Babylonian birth horoscopes preserved on cuneiform clay tablets often mention the date of heliacal risings of planets if they occurred close to the date of the birth.¹⁴⁸ Thus, it is obvious that Matthew had precisely this phenomenon in mind and that the "star" was a planet. The passage from invisibility to visibility in the eastern morning sky was seen as analogous with a birth. From the point of view of ancient astrology, the first appearance of a star brought something new into the world and was, therefore, unlike present-day astrology, considered very important.

There remains the question of why tradition wrongly arrived at the conclusion that the Magi saw the star "in the Orient" rather than "in its rising". Most probably, this must be explained from the fact that the Church Fathers wanted to obliterate any possible association of Matthew with astrological concepts.¹⁴⁹ However, Justin Martyr (2nd cent.) was of the opinion that the *magi* saw the star "in its rising".¹⁵⁰ The reframing of *en tē anatolē* as "in the Orient" was probably supported by the fact that in the Roman Empire and in Byzantium, *anatolē* in singular was used as a term for the eastern part of the Empire or for the Byzantine Empire, respectively.¹⁵¹ However, this usage should not be assumed for Matthew himself, because a singular of the word denoting a geographic region is not found in the New Testament or the Septuagint. In addition, Matthew himself makes it obvious that he was aware of a difference between the usage of the singular and the plural.

¹⁴⁸ There are examples in Rochberg, *The Heavenly Writing* and Rochberg, *Babylonian Horoscopes*.

¹⁴⁹ Panaino, "Nuove riflessioni sulla stella dei Magi tra fonti canoniche e apocrife".

¹⁵⁰ Quoted on p. 94 and p. 259.

¹⁵¹ If the expression "ἐν τῆ ἀνατολῆ" is searched in the Internet, a huge number of references to Matthew and to Byzantine texts appears. In the latter, the expression refers to the Byzantine Empire or the Eastern Church. Josephus Flavius uses ἀνατολή in singular to designate the east of the Roman Empire. (*De Bello Iudaico 3.3*) The same usage is also found in the apocryphon 1 Clement 5:6.

Antonio Panaino is of the opinion that the text does not provide any clues about whether it refers to a heliacal or an ordinary rising of the star.¹⁵² In view of the strict textual evidence, he might be right. However, from its astronomical and astrological background such interpretive "caution" is out of place. All stars and planets that rise and set can be observed at their rising over a period of several months. According to Matthew 2:2, the magi infer the birth of the "king" from the appearance of the star. Only the heliacal, or possibly also the acronychal, rising of a star would be suitable to indicate a target date.

David Hughes wrongly asserts that *anatolê* (ἀνατολή) necessarily is an evening rising (a so-called *acronychal rising*) whereas a morning rising (*heliacal rising*) would have to be denoted by the term *epitolê* (ἐπιτολή) or *phainesthai* (φαίνεσθαι).¹⁵³ The counter-evidence comes from Ptolemy in Tetrabiblos I.8:

Οί τε πλανώμενοι καὶ ἑῷοι μόνον ἀπὸ μὲν τῆς ἀνατολῆς μέχρι τοῦ πρώτου στηριγμοῦ μᾶλλόν εἰσιν ὑγραντικοί, ἀπὸ δὲ τοῦ πρώτου στηριγμοῦ μέχρι τῆς ἀκρονύκτου μᾶλλον θερμαντικοί, ἀπὸ δὲ τῆς ἀκρονύκτου μέχρι τοῦ δευτέρου στηριγμοῦ μᾶλλον ξηραντικοί, ἀπὸ δὲ τοῦ δευτέρου στηριγμοῦ μέχρι δύσεως μᾶλλον ψυκτικοί.

The *heliacal* (*heôoi*) planets are producing moisture only from the *rising* (*anatolês*) to the first station; from the first station to the *evening* (*akronyktu*) [rising] they are rather producing warmth, from the evening [rising] to the second station producing rather dryness and from the second station to the setting producing rather cold.¹⁵⁴

Thus if Hughes, Ferrari, Seymour, Teres, and others assert that *anatolē* mandatorily denotes an evening rising (or acronychal rising), then this assertion must be contradicted. Fortunately, this error was already corrected by Michael Molnar and Robert Schmidt. However, Robert Schmidt and Dorian Greenbaum have caused new confusion with their remarks, which, in this author's opinion, are oversubtle. In an interview with Courtney Roberts, they state that the expression *en tē anatolē* ($\dot{\epsilon}v \tau \tilde{\eta} \dot{\alpha}v\alpha\tauo\lambda \tilde{\eta}$) was not a current astrological term, which actually would have been *ep' anatolē* ($\dot{\epsilon}\pi' \dot{\alpha}v\alpha\tauo\lambda \tilde{\eta}$). In addition, the term would usually have been accompanied by adjectives

¹⁵² Panaino, "Nuove riflessioni sulla stella dei Magi tra fonti canoniche e apocrife", p. 82.

¹⁵³ Hughes, *The Star of Bethlehem*, p. 2ff.

¹⁵⁴ It can also be shown with Ptolemy that *phainesthai* does not necessarily indicate a heliacal rising – although this is surely the case in Matthew's text – but in principle could also mean an evening rising. Note the following enumeration of the movement of planets in Tetrabiblos II.6:

^{...} ὅταν οἱ ... ἀστέρες ἀνατολὰς ἢ δύσεις ἢ στηριγμοὺς ἢ ἀκρονύκτους φάσεις ποιῶνται ...

[&]quot;... when the ... stars make risings (*anatolas*), settings, stations or evening risings (*akronyktus phaseis*)".

Here *anatolê* is being used for a heliacal rising and *phasis* (from *phainesthai*) for an evening rising.

like *heoos* (\tilde{k} ooc, "matutinal") or *hesperios* (\tilde{k} $\sigma\pi$ \tilde{k} ρ ioc, "vespertine", when appearing in the evening, either heliacally or acronychally). From these explanations, Roberts draws the conclusion that there is not enough information available to come to a decision about the kind of rising referred to by Matthew.¹⁵⁵ However, if Matthew as a non-astrologer does not perfectly master astrological or astronomical terminology, this does not mean that the issue is unclear. The usage of a "wrong" preposition (en instead of epi) is excusable. Whether one says "in the rising" or "at the rising", is of minor importance. In reality, the expression *en tē anatolē* does appear in ancient astrological texts.¹⁵⁶ Furthermore, it is evident from ancient astrological literature that it was the *heliacal* risings of the planets and stars that were considered particularly powerful and auspicious.¹⁵⁷ In reality, there can be no doubt that Matthew is talking of a heliacal rising. Incidentally, Schmidt notes that Matthew's expression "time of the appearing star" (τον γρόνον τοῦ φαινομένου ἀστέρος) in verse 2:7 is a strong indication of a heliacal rising.¹⁵⁸ It must also be noted that an evening rising is not really an "appearance" (phainesthai) of a star. A star that makes its acronychal rising could also have been observed in previous nights; it was just rising a bit later in the evening.

Incidentally, this very natural astrological interpretation of Matthew is also found in the Heliand, an Old Saxon epic about the life of Jesus from the 9^{th} century. There, the *magi* inform Herod that a prophet of their country had predicted the birth of a wise king and a star would appear on the same day:

He quað that an them selbon daga, / the ina sâligna an thesan middilgard / môdar gidrôgi, sô quað he that ôstana / [ên] scoldi skînan himiltungal huît, /...

He said that on the same day / on which the blessed child into this human world (*middilgard*) / would his mother bear, that from the east then / would appear a bright heavenly star, / ...¹⁵⁹

¹⁵⁵ Roberts, The Star of the Magi, pp. 120f.

¹⁵⁶ Pseudo-Manetho 2 Γ, Apotelesmatica: Τίς ἑκάστου τῶν ἑπτὰ πλανητῶν ἐν τῆ ἀνατολῆ, καὶ τίς ἐν τῆ δύσει δύναμις.

Hephaestion of Theben, *Apotelesmatica* 3.1: καὶ τὰ τροπικὰ [ζώδια] δὲ ἐν τῆ ἀνατολῆ ὄντα μετατρέπει ταχέως τὸ πραττόμενον.

Plotinus, *Enneads* II.3.3: Τὸ δὲ τοὺς μὲν [πλανήτας] αὐτῶν χαίρειν λέγειν δύνοντας, τοὺς δὲ ἐν ἀνατολαῖς ὄντας, πῶς οὐκ ἄλογον.

Proclus, In Platonis Rem publicam comentarii (Kroll) p. 218: πλῆθος ἄστρων ... ὦν ἕκαστον ... ἐν ταῖς ἀνατολαῖς καὶ δύσεσιν ... ὀρώμενον.

¹⁵⁷ Vide Paulus Alexandrinus, *Eisagogika* 14, as well as this author's explanations about "spear-bearing" on pp. 247ff.

¹⁵⁸ "This Greek phrase strongly suggests a heliacal rising". (Roberts, op. cit., p. 122.

¹⁵⁹ Heliand VII,587-590. Original text according to the edition by Behagel/ Taeger.

And a little later:

... / Uui gisâhun morgno gihuilikes blîcan thana berhton sterron...

 \dots / We saw it (: the star, D.K.) every morning shining, the bright star...¹⁶⁰

This description obviously refers to the heliacal rising of some star during the days after Jesus' birth.¹⁶¹

The "Time of the Appearing Star"

In Matthew 2:7, Herod asks the magi to tell him precisely "the time of the appearing star" ($\tau \dot{o} v \chi \rho \dot{o} v o \tau \sigma \ddot{o} \phi \alpha v o \mu \dot{e} v o v \dot{\alpha} \sigma \tau \dot{e} \rho o \varsigma$). Most translations and the majority of authors on the Star of Bethlehem interpret this expression to mean "the time at which the star *appeared*". This interpretation seems to make sense, since according to verse 16, Herod needs this information because he wants to kill the child. Also, this understanding of the text perfectly fits the conclusion found in the previous chapter that Matthew must be referring to a heliacal rising. The heliacal rising of a star occurs on some specific date.

However, some authors have pointed out that the Greek word *chronos* used by Matthew does not mean "time" in the sense of "point in time", but rather in the sense of "period of time" or "time duration", whereas the correct word for "point in time" would have been *kairos*. However, at closer inspection, the situation is more complicated. According to the great dictionary of Liddell and Scott, *chronos* could also refer to a "date".¹⁶² Moreover, the following usage of the word in Luke 1:56 should be considered:

τῆ δὲ Ἐλισάβετ ἐπλήσθη ὁ χρόνος τοῦ τεκεῖν αὐτην, καὶ ἐγέννησεν υἰόν.

And to Elisabeth was the time fulfilled for her bringing forth, and she bare a son, (Young's literal translation)

And there is the following interesting parallel in Luke 2:6f.:

έπλήσθησαν αί ήμέραι τοῦ τεκεῖν αὐτήν, καὶ ἔτεκεν τὸν υίὸν αὐτῆς τὸν πρωτότοκον.

the days were fulfilled for her bringing forth, and she brought forth her son - - the first-born... (Young's literal translation)

Even here, it is obvious that the word *chronos* actually means "period of time", for if a "time is fulfilled" then this refers to the end of a *time span*.

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¹⁶⁰ Heliand VII,601-602.

¹⁶¹ The Heliand is of the opinion that the star lead the *magi* towards the west. If so, they would have arrived in Bethlehem with considerable delay.

¹⁶² Cf. also Liddell-Scott-Jones online under χρόνος, 2b: "*date, term* of payment due, Leg. Gort.1.10, al.", and the references under 2a.

However, in the expression "time of bringing forth", the word *chronos* obviously takes on the meaning "time lapsed, fixed date, term", since a woman does not give birth *during* nine months, but *after the completion of* 9 months. If this meaning of the word is applied to Matthew, then he might be referring to the "term of the appearing star", thus of the completion of a cycle of the star. If so, the word *chronos* would be almost equivalent with *kairos* in this text. This view is also supported by the following verse from Mark, which also refers to a "completion of time", but uses *kairos* instead of *chronos*:

πεπλήρωται ὁ καιρὸς καὶ ἤγγικεν ἡ βασιλεία τοῦ θεοῦ.

Fulfilled hath been the time, and the reign of God hath come nigh, (Mark 1:15; Young's literal translation)

This proves that when in the Gospels there is talk of the "completion of time", the words *chronos* and *kairos* are interchangeable. Thus it follows that the word *chronos* in Matthew 2:7 does not necessarily refer to a "period of time", but could very well refer to the "point in time" of the appearance of the star.

Moreover, authors who insist on the meaning "period of time" run into new problems. The translation "period of time of the appearance" would not make any sense, because the "appearance" of a star takes place in a point in time that can be precisely determined. For this reason, Werner Papke proposes the following translation:

Zeitdauer des (immer noch) scheinenden Sternes.¹⁶³ duration of the (still) shining star

And Strobel:

Zeitraum, während dessen der Stern schien.¹⁶⁴ period of time, during which the star was shining

However, in the Gospels, the passive verb form *phainesthai* as used by Matthew never means "to shine", but always "to appear", even with the same ambiguity it has in English, i.e. either in the sense of "to become visible" or in the sense of "to seem". Only the active form of the verb, namely *phainein*, is used as meaning "to shine", e.g. in John 1:5:

τὸ φῶς ἐν τῇ σκοτία φαίνει The Light shines in the darkness. (NASB)

¹⁶³ Papke, Das Zeichen des Messias, p. 24.

¹⁶⁴ Strobel, "Weltenjahr, Große Konjunktion und Messiasstern", p. 1083.

Thus, in order to be in agreement with Papke's or Strobel's translation, Herod would have to ask the question about:

τὸν χρόνον τοῦ *φαίνοντος ἀστέρος the time of the *shining* star¹⁶⁵

instead of the wording given by Matthew:

τὸν χρόνον τοῦ φαινομένου ἀστέρος

the time of the appearing star

The Vulgate, the Latin translation of the New Testament, correctly renders the expression as follows:

tempus stellae quae apparuit eis the time of the star that appeared to them

Also the Peshitta, the Syriac-Aramaic translation of the Bible, which is used by the Syriac Orthodox Church, has it in this sense:

تىمى مەلمى بادىكە كەردىكە كە

in what time/time span the star appeared to them

The verb form ' $eth^e z\bar{i}$ (خمنطند,) is in passive voice and literally means "it was seen, it appeared".

The Coptic translations also follow this understanding:

πισμοτ ήτε πισιοτ εταφοτωνε (Bohairic)

the time/time span of the star, that appeared

 $\overline{\pi}$ corosig $\overline{\mu}\pi$ cior \overline{n} tagorwnz ebol (Sahidic)

the time/time span of the star that appeared.

Here again, the verb $w\bar{o}nh$ (orwns and orwns ebox) means "to reveal, to be revealed, to become visible, appear", but never "to shine".

Now, if the grammar of Matthew's sentence is taken very strictly, then Herod does not ask for "the time of the star that had appeared $(*\varphi\alpha\nu\epsilon\nu\tau\sigma\varsigma)^{*166}$, but

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¹⁶⁵ Ferrari believes that the expression *phainontos* alludes to a current Greek name of Jupiter, namely *Phaethon* (Φαέθων), which is derived from the same verbal root and means "the shining one". Furthermore, he believes that *Phaethon* is a translation of the Babylonian expression used for Jupiter, *kakkabu peşû* (MUL.BABBAR), i.e. "white/bright star". (Ferrari d'Occhieppo, *Der Stern von Bethlehem* (1994), p. 168) However, since *phainesthai* cannot mean "to shine" in Matthew, but only "to appear", Ferrari's suggestion is not plausible. Moreover, *Saturn* would be an even better candidate than Jupiter because his alternative Greek name is *Phainon* (Φαίνων), "the shining one", which is the ordinary present participle of the verb. Incidentally, in Hellenistic Greek, all planets had names that referred to their luminous appearance. Mercury was called *Stilbon* (Στίλβων), "the glittering one", Venus *Heosphoros* (Έωσφόρος), "the bringer of the dawn", and *Phosphoros* (Φωσφόρος), "the bringer of daylight" (both male gender!), and Mars *Pyroeis* (Πυρόεις), "the fiery one".

for "the time of the appearing ($\varphi \alpha \nu \circ \mu \epsilon \nu \circ \nu$) star". Perhaps this difference is oversubtle; however, if one wants to take it seriously, the following interpretation would be possible, too:

Since heliacal risings recur periodically, Herod's question could be interpreted thus: "On what date does the star usually make its heliacal rising? When does it usually rise?" In the case of fixed stars, the calendar date of the heliacal rising is the same every year. Only over the course of centuries does the date of the rising slowly shift as a result of the precession of the equinox. Did Herod want to know the calendar date of the regular heliacal rising of a star? Of course, such a date could only be given in the Roman (Julian) or Egyptian Ptolemaic calendar, which was based on a year length of 365¹/₄ days, and not in the Jewish luni-solar calendar, which was based on the lunar year of 354 days and leap months. Within the Jewish calendar, heliacal risings of fixed stars would fall on different dates every year. However, under Roman occupation, the Julian calendar might have been officially used in Palestine as well, especially in communication with foreign visitors. The fact that astrologers are rather interested in planets than in fixed stars and that the heliacal risings of planets do not fall on the same date very year need not be a valid objection. When Herod put his question, he did not know yet which star the magi were referring to. Also, he need not have know that there was this kind of difference in the behaviour of fixed stars and planets.

It is also possible that Herod did not want to find out the date of the appearance of the star, which seemed to have occurred recently, but rather the time span that lay between two heliacal risings of the star. Such planetary cycles are called their *synodic periods*. In the case of Jupiter and Saturn, the synodic period lasts a bit longer than a year, in the case of Venus about 584 days, and in the case of Mars more than two years. But what would have been the point for Herod to have asked about the synodic period of the star or the date of its heliacal rising? Did he not just want to kill all the babies born close to the last heliacal rising, but, to make sure, also those who were born at the time of the previous heliacal rising?

However, the question about the period of the star would not really have supplied Herod with a useful answer. Rather, it seems that *Herod wanted to learn the date on which the star appeared (or usually appeared) because he wanted to know the exact time the child was born.*

¹⁶⁶ Incidentally, this is the paraphrase given by Epiphanius in his work Adversus Haereses (Panarion) 51.22.13: ... ἀκριβῶς ὁ Ἡρῷδης ἐπυνθάνετο <παρ'> αὐτῶν τῶν μάγων τὸν χρόνον τοῦ φανέντος ἀστέρος ...

All Boys, Two Years Old and Under

Unfortunately, Matthew does not relate the answer that the magi gave to Herod's question about the date of the appearance of the star. Some authors see an indication of it in verse 16, in that Herod had all the boys of two years old and under killed

κατὰ τὸν χρόνον ὃν ἠκρίβωσεν παρὰ τῶν μάγων in accordance with the time he had ascertained from the magi.

Does this mean that the star had already appeared two years before the arrival of the *magi* and was still visible when they arrived? And does it mean that Jesus was born during this two-year period of time and that he was not a baby anymore when the *magi* arrived? Or is Matthew to be interpreted in the sense that Jesus was born only two years after the appearance of the star? Origen (185-254 CE) chose the former solution. In his *Commentary on Matthew*, which is only partly preserved, he writes:

Ό χρόνος, ὃν ἡκρίβωσεν ὁ Ἡρώδης παρὰ τῶν μάγων, διετὴς ἦν[.] μετὰ γὰρ τὸ γεννηθῆναι τὸν σωτῆρα διὰ δύο ἐτῶν ἦλθον ἀπὸ τῆς χώρας αὐτῶν. τὰ γοῦν απὸ διετοῦς βρέφη ἀνεῖλεν. ...

The time span that Herod inquired from the magi was of two years. For two years after the Saviour was born, they came from their country. At least, he killed up to two-year-old children. ...

Έντεῦθέν σοι ἡ γνῶσίς ἐστιν ὅτι οὐ παραυτὰ τοῦ κυρίου γεννηθέντος ἐν τῷ σπηλαίῷ προσεκύνησαν οἱ μάγοι τὸ βρέφος τὸ ὑπὸ τοῦ ἀστέρος δηλούμενον μηνύοντος ἐν τῇ φάτνῃ, ἀλλ' ὅτι μὲν οἱ ποιμένες εὐθέως ἐν ἐκείνῃ τῇ νυκτὶ μετὰ τὴν τῶν ἀγγέλων θέαν δρομαῖοι ἀπήεσαν ἰδεῖν τὸ ἀληθὲς, ἅτε γειτνιῶντος τοῦ σπηλαίου αὐτοῖς, οἱ δὲ μάγοι συμπεριλαβόντος ἕτους δευτέρου μετὰ τὸ εὐλογηθῆναι αὐτὸν ὑπὸ Συμεὼν καταβάντων πάλιν ἐν τῇ Βηθλεὲμ <τῶν γονέων> τοῦ βρέφους φερομένου τε ἐν ἀγκάλαις τῆς τεκούσης καὶ παροικῆσαι ἐν οἰκίᾳ ξενίας ἡμέρας πολλάς.

From this, you can learn that it was not immediately after the birth of the Lord in the cave that the *magi* adored the child that had been shown to them by the star, pointing to it in the manger; but that [on the one hand] the shepherds, immediately during that night, after the vision of the angels, went there, since the cave was near to them; whereas [on the other hand] the *magi* [only went there] after the completion of the second year after he had been praised by Simeon, and after [his parents] had again gone to Bethlehem, the mother having carried him in her arms, and had stayed in a guest house for many days¹⁶⁷.¹⁶⁸

¹⁶⁷ The author apologises for the complicated translation, which, however, is literal and tries to reproduce the logical structure of the original. The subject of παροικῆσαι might be the parents of Jesus. Grammatically, this is difficult, but it seems logical.

The complications that arise if the arrival of the *magi* is assumed too long after the birth are obvious. According to Luke, Joseph and Mary lived in Nazareth, but Jesus was born in Bethlehem because they happened to be there on the occasion of Quirinius' census. However, the holy family would not have stayed in Bethlehem for two years until the *magi* would have arrived. For this reason, Origen and numerous authors after him supposed that the holy family had returned to Bethlehem several months or even two years after Jesus' birth. Otherwise the *magi* would have missed them.

Now, all celestial bodies that can rise heliacally have a *second* heliacal rising within two years. The planet Mars is the only exception having a synodic period of two years and 50 days. Thus if the *magi* had visited Jesus only two years after his birth, then the star would have had to appear *twice* within this time span: the first time around his birth day and the second time apparently at the time the *magi* arrived. In the mean time, the star would have become invisible. Some authors are actually of the opinion that the star appeared twice. So, the question returns whether Herod's question concerning the "time of the appearing" star could have referred to the synodic period of the star.

However, in reality Matthew does *not* say that the star *disappeared* and *reappeared again*. The Magi arrive in Jerusalem and say: "We have seen his star in rising" (εἴδομεν αὐτοῦ τὸν ἀστέρα ἐν τῇ ἀνατολῇ). There is no mention of its having disappeared again. Even when a "rising" is mentioned a little later, this cannot be taken as an indication of its temporary disappearance. The text says literally:

(9) οἱ δὲ ἀκούσαντες τοῦ βασιλέως ἐπορεύθησαν, καὶ ἰδοὺ ὁ ἀστὴρ ὃν εἶδον ἐν τῇ ἀνατολῇ προῆγεν αὐτούς, ἕως ἐλθὼν ἐστάθη ἐπάνω οὖ ἦν τὸ παιδίον.

(9) And they, having heard the king, departed. And lo, the star that they had seen in the rising, went before them, 169 until it came and stood over where the child was.

(10) ἰδόντες δὲ τὸν ἀστέρα ἐχάρησαν χαρὰν μεγάλην σφόδρα.

(10) And having seen the star, they rejoiced with very great joy.

It does not say: "the star they had seen in the rising, *re-appeared* in rising", but: "it went before them". Thus, to the contrary it must be concluded that the star had never disappeared since Jesus' birth and that it could be "seen again" *every morning before daybreak after its first appearance* in the eastern sky. The most obvious and simple understanding of these lines results if it is assumed that the *magi again saw* the star on their way from Jerusalem to Bethlehem, after having observed its heliacal rising only a couple of days

¹⁶⁸ Origenes, *Commentarius in Matthaeum*, Frag. 23. ed. Erich Klostermann XII (GCS 41), p. 25). Cf. also: Epiphanius, *Adversus Haereses (Panarion)* 51,22,13 (ed. Holl II, p. 287); Eusebius, *Quaestiones in Stephanum*, XVI, 2 (MPG 22, col. 934);

¹⁶⁹ In the Vulgate: stella quam viderant in oriente, antecedebat eos.

earlier. In the next chapter, it will be shown that in fact the appearance of the star, the birth of Jesus, and the arrival of the *magi* must all have occurred roughly at the same time.

Some authors have pointed out that in Luke, where baby Jesus is visited by the shepherds, he is called a *brephos* ($\beta p \epsilon \phi o \varsigma$, Luke 2:12; 16), i.e. "a newborn babe", whereas in Matthew, where he is visited by the *magi*, he is called a *paidion* ($\pi \alpha \iota \delta i \circ v$, Matthew 2:8; 9; 11; 13), i.e. "a little child". From this, it has been concluded that Jesus was not a "newborn babe" anymore when the *magi* arrived. However, the usage of words in Luke contradicts this theory, for in the very same chapter, in verse 2:17, he uses the word *paidion* for the newborn babe.¹⁷⁰

It follows that the murder of the up to two-year-old boys cannot be explained by the assumption that Jesus was already two years old when the *magi* arrived. What other solution is there?

The alternative interpretation that has been mentioned is the following: Jesus could have been born two years after the appearance of the star, and the *magi* would have arrived shortly after his birth. This is, e.g. the opinion of the Armenian Infancy Gospel:

And soon, an angel of the Lord rushed into the country of the Persians in order to admonish the *magi* kings to adore the new-born child. And these, after having been lead by the star during nine months, arrived at their destination at the very moment the virgin became mother.¹⁷¹

Immediately after the Annunciation of the Lord (the conception of Jesus), an angel travels to Persia and admonishes the *magi* to travel to Jerusalem. During nine months, a star leads them, and they arrive just in time to find the newborn baby Jesus in Bethlehem. It is obvious that the angel himself is the star. Also, it is obvious that the angel who travels to Persia is the same angel Gabriel who had appeared to Mary just before that, on the day she had become pregnant. This interesting idea will be studied more closely later. Thus, the star seems to have first informed the *magi* about the conception and then guided them to Jerusalem and Bethlehem.

A Jewish text from late antiquity titled *Aggadat ha-Mashiah* asserts that the Messiah will be born *two years* after the appearance of a star. The text begins as follows:

¹⁷⁰ Incidentally, Origen even uses the word *brephos* for the two-year-old Jesus. Sometimes quibbleism does not lead to a solution of the problems. (Origenes, *Commentarius in Matthaeum*, fragment 23; quoted above on p. 88.)

¹⁷¹ The French translation by Peeters reads as follows: "Et aussitôt un ange du Seigneur s'en fut en hâte au pays des Perses, prévenir les rois mages d'aller adorer l'enfant nouveau-né. Et ceux-ci après avoir été guidés par l'étoile pendant neuf mois, arrivèrent à destination au moment où la vierge devenait mère." (Peeters, *Évangiles apocryphes*, "Le livre arménien de l'enfance", vol. II, p. 97 (chap V,10); cf. pp. 131f. (chap. XI,1).

דרך כוכב מיעקב תאנא משום רבנן שבוע שבן דוד בא בו שנה ראשונה אין בה מזון כל צורכה. שנייה חצי רעב משתלחין. שלישית רעב גדול. ברביעית לא רעב ולא שובע. בחמישית שובע גדול. ויצמח כוכב ממזרח והוא כוכבו של משיח והוא עושה במזרח ט"ו יום ואם האריך הוא לטובתן של ישראל. ששית קולות ושמועות. השביעית מלחמות. ומוצאי שביעית יצפה למשיח ויתגאו בני מערב ויבואו ויחזיקו מלכות בלא אפים ויבואו עד מצרים וישבו כל השביה. A star will shine forth from Jacob. In the name of the rabbis it is taught:

The heptad in which the Son of David comes:

first year: there is no nourishment in it, there is lack of everything;

second [year]: half a famine is launched;¹⁷²

third [year]: a great famine;

fourth [year]: neither famine nor plenty;

fifth [year]: great abundance,

and the star will shine forth from the East, and it is the Star of the Messiah; and it will stay in the east for 15 days, and if it stays longer, it will be for the good of Israel;

sixth [year]: voices and hearings;

seventh [year]: wars;

and at the close of the seventh, Messiah is to be expected.

And the sons of the west will exalt themselves and will go and seize royal power without any effort, and they will go until Egypt and lead away many captives.¹⁷³

The text predicts that the star will appear two years before the Messiah "is expected" (יצפה למשיח). Whether this "expectation" refers to the birth or the public appearance of the adult Messiah is not clear. However, let it be assumed that it refers to his birth! Would this information accord with the description of Matthew? Is it possible that the *magi* arrived shortly after the birth of Jesus, whereas the star had already appeared two years earlier? If so, however, the killing of two-year-old children would have made little sense. According to the Aggadah, the Messiah was to appear "at the close of the

¹⁷² Literally: "they will send". Or: "They will shoot the arrows of famine."

¹⁷³ Tobiah bar Eliezer, *Midraš leqaḥ tob* (מדרש לקח טוב), vol. 2, p. 258 (Hebrew); translation D. K. Cf. also: Mitchell, *The Message of the Psalter...*, pp. 304f.; Hughes, *The Star of Bethlehem*, p. 68.

seventh" year, whereas the star was to appear *in the course* of the fifth year. The time span between the two events is thus *longer than* two years. Herod would have had to kill up to *three-year-old* boys in order to ensure that he had caught the dangerous child. Thus, the alleged link between the *Aggadat ha-Mashiah* and the story of Matthew is not very convincing.¹⁷⁴

Herod commands that all children up to the age of two years must be killed, "according to the time that he had learnt precisely from the magi" (κατὰ τὸν χρόνον ὃν ἡκρίβωσεν παρὰ τῶν μάγων). How else could these "two years" be interpreted? The most likely explanation is that Herod "*learnt*" from the Magi "*the precise point in time*" (ἡκρίβωσεν τὸν χρόνον) of the birth and then commanded that all boys who were two years old or younger at that point in time be killed. The date of appearance of the star and the two-year limit simply would have served the purpose of *defining precisely who was* to be killed and ensuring that the "dangerous child" would not escape death.

מטה ישועות האלה יתן ייי לחפצי בה אם מנחם בן עמיאל וכוכב גדול יגיה לפניה וכל הכוכבים ישתוללו ממסילותיהם ותצא חפצי בה אם מנחם בן עמיאל ותהרוג שני מלכים ושניהם לבבם להרע ... (S. 134)

The Lord's Messiah – Nehemiah ben Hushiel (= Messiah ben Joseph) – *will come five years after Hephzi-bah*, and he will collect all Israel like one single man, and they will hold out in Jerusalem for 40 years."

¹⁷⁴ In the *Sefer Zerubbabel*, a Jewish apocalyptic text from the 7th century, a star appears *five* years before the arrival of the Messiah, or more correctly: before the arrival of the first of two Messiahs. Zerubbabel asks the angel Metatron: "When will *the light of Israel* come?" (מתי יבא אור ישראל) The apocalyptic events start as follows: (according to Lévy, "L'apocalypse de Zorobabel et le roi de Perse Siroès"):

משיח ייי הוא נחמיה בן חושיאל יבא חמש שנים אחרי חפצי בה ויקבוץ את כל ישראל כאיש אחד (p. 135) ויעמדו ארבעים שנה בירושלים (

[&]quot;The Lord will give a rod [for accomplishing] these salvific acts to Hephzi-bah, the mother of Menahem ben 'Amiel (= Messiah ben David). And *a great star will shine before her*, and all the stars will wander aimlessly from their paths. Hephzibah, the mother of Menahem ben 'Amiel, will go forth and kill two kings, the heart of both of which are [determined] to do evil...

The subsequent assault by the Persian king Sheroi (שירויש) fails; after him, however, Armillus (שירוים = Romulus), the son of Satan, appears before Jerusalem, defeats Messiah ben Joseph, and kills him. This is the moment where Hefzi-bah's son Messiah ben David enters the scene and destroys Armillus and all heathen armies.

An English translation of the complete text is found here: http://religiousstudies.uncc.edu/people/jcreeves/sefer_zerubbabel.htm

A Predictable Celestial Phenomenon?

If the appearance of the star referred to a heliacal rising, the magi were in a position to predict the time of this occurrence. If they could calculate it ahead of time, they did not have to wait in their homeland at all for the appearance of the star. Instead, they could have planned their journey in such a way that they would have arrived in Jerusalem at the precise time of the heliacal rising and the precise time of the birth of Jesus. Herod's question for "*the time of the appearing star*" is reminiscent of the question for a date that can be indicated in a general way or determined beforehand.

In fact, there are hints that the magi calculated the star beforehand and these hints shall be investigated more closely because they have consequences for the identification of the star. If the magi predicted the appearance of a star, then comets, or novae, or supernovae, and other extraordinary manifestations were *not* candidates for the Star of the Messiah because all these phenomena could not be calculated ahead of time.

Most writers assume that the magi had already seen the star in the orient and only then left for Palestine. They would then have arrived in Jerusalem weeks or months later. As has been seen, however, the text does not say that. It simply states that the magi arrived in Jerusalem and said that they had seen the heliacal rising of the star, and therefore the king of the Jews had to have been born.

At a first unprejudiced reading, verse 1 of Matthew's text sounds exactly as though the three events – the arrival of the magi in Jerusalem, the birth of Jesus and the appearance of the star – happened more or less simultaneously:

Τοῦ δὲ Ἰησοῦ γεννηθέντος ..., ἰδοὺ μάγοι ἀπὸ ἀνατολῶν παρεγένοντο εἰς Ἱεροσόλυμα λέγοντες[.] ποῦ ἐστιν ὁ τεχθεὶς βασιλεὺς τῶν Ἰουδαίων; εἴδομεν γ**ὰρ** αὐτοῦ τὸν ἀστέρα ἐν τῆ ἀνατολῆ.

When Jesus was born..., lo, magi came to Jerusalem and asked: "Where is the new-born king of the Jews? *For* we have seen his star rise."

The text perhaps does not *necessarily* imply simultaneity of the three events. However, it is very likely the meaning intended, because Matthew puts the events close together. A confirmation for simultaneity of the arrival of the magi and the birth of Jesus is found in the early Christian author Justin Martyr (2nd century), who writes:

Άμα γὰρ τῷ γεννηθῆναι αὐτόν, μάγοι, ἀπὸ Ἀραβίας παραγενόμενοι προσεκύνησαν αὐτῷ, πρότερον ἐλθόντες πρὸς Ἡρώδην.

For, at the same time ($\ddot{\alpha}\mu\alpha$) as his birth, Magi came from Arabia and paid him homage, after they had first come to Herod.¹⁷⁵

¹⁷⁵ Justin Martyr, *Dialogue with Trypho*, 77, p. 657.

Furthermore, the star allegedly also appeared at the same time:

μάγων ... εἰπόντων, ἐξ ἀστέρος τοῦ ἐν τῷ οὐρανῷ φανέντος ἐγνωκέναι ὅτι βασιλεὺς γεγένηται ἐν τῇ χώρα ὑμῶν.

the *magi* said that they learnt from a star that had appeared in the sky that a king was born in your country.¹⁷⁶

And:

Άνατείλαντος οὖν καὶ ἐν οὐρανῷ ἅμα τῷ γεννηθῆναι αὐτὸν ἀστέρος, ... οἱ ἀπὸ Ἀραβίας μάγοι ἐκ τούτου ἐπιγνόντες, παρεγένοντο, καὶ προσεκύνησαν αὐτῷ.

When a star rose in the sky at the same time $(\ddot{\alpha}\mu\alpha)$ as his birth, ... *magi* from Arabia noticed it and came and prostrated in front of him.¹⁷⁷

Thus this text, which is only a few decades younger than the Gospel of Matthew and whose author was born only 100 years after Jesus, very concisely states the simultaneity of the birth, the star, and the arrival of the *magi*. At the same time, it is also obvious that Justin understands how astrology works. A writer without any knowledge of astrology might have imagined – just like most of the researchers of the Star of the Messiah – that the magi saw the star in their homeland, then started their journey and arrived in Jerusalem weeks or months later.¹⁷⁸ However, Justin obviously is a source that knows *more*. He knows about the predictability of heliacal risings, about the possibility of coordinating a long journey with such an event and about the fact that it would have been *natural for astrologers* to synchronise their actions with celestial events. Such ideas would not have occurred to a writer who had no knowledge of astrology or astronomy.

Unfortunately, there is no mention in the Gospel of Luke of the star and the *magi*. However, immediately after the birth story, in Luke 2:8ff., follows the story of the shepherds in the field. A shining angel appears to them *at the very same time* and heralds the birth of the child. After the angel has "gone away" to the sky, the shepherds, like the *magi*, come to see the child. Now, it seems natural to identify the angel that rises to the sky with the heliacally rising star of the Messiah, even more so as this is not the only place in the Bible where an angel stands for a star.¹⁷⁹ Thus, this is another clue that the birth of Jesus was believed to have been *synchronous* with the appearance of the star, and the visit of pious people. The story of the shepherds and the angel will be studied in more detail later (pp. 347ff.).

¹⁷⁶ op. cit., 78, p. 657.

¹⁷⁷ op. cit., 106, p. 724.

¹⁷⁸ Jerusalem is 900 km as the crow flies from Babylon, and the Arabian desert lies between the two cities. The more likely itinerary would have lead along the Euphrates in north-west direction to Aleppo and from there to the south. The 1500-km journey would probably have taken them two or three months.

¹⁷⁹ Off. 1,20; 9,1; Mt 24,29; Mk 13,25; Judas 1,13.

Another text that deserves to be mentioned is the apocryphal Infancy Gospel of James. There the story goes as follows: When Joseph and pregnant Mary arrive in Bethlehem, Mary suddenly goes into labour. Joseph brings her into a cave and calls for a midwife.

καὶ ἀπίει ἡ μαῖα μετ'αὐτοῦ. καὶ ἔστησαν ἐν τῷ τόπῳ τοῦ σπηλαίου, ... καὶ ἐφάνη φῶς μέγα ἐν τῷ σπηλαίῳ, ὥστε τοὺς ὀφθαλμοὺς {ἡμῶν} μὴ φέρειν. καὶ πρὸς ὀλίγον τὸ φῶς ἐκεῖνο ὑπεστέλλετο, ἕως οὖ ἐφάνη τὸ βρέφος καὶ ἦλθε καὶ ἕλαβε μασθὸν ἐκ τῆς μητρὸς αὐτοῦ Μαρίας.

And the midwife went with him. And they stepped on the place of the cave. ... and a great light appeared in the cave, so that the eyes could not bear it. And after a short while, that light withdrew, until the child appeared and came and took a breast of his mother Mary. (Infancy Gospel of James 19:2)

In this gospel, which is close to Luke in several respects¹⁸⁰, the birth is also accompanied by the appearance of a light. Again, this light could be related to the Star of Bethlehem. A bit later, in chapter 21, follows a version of the visit of the *magi*, which shall be studied later.

Therefore, it can be assumed, with a fair degree of certainty that the three events, namely the arrival of the magi, the appearance of the star and the birth of the Messiah happened approximately at the same time. However, this presupposes that the magi could predict the appearance of the star, and this further supports this author's interpretation, that the *magi* were referring to the heliacal rising of a generally known celestial body. Because that was something they could easily calculate ahead of time.

In addition, it must be remembered that Joseph was not resident of Bethlehem – if Luke is right –, but of Nazareth and that Jesus was born *in make-shift lodging* in Bethlehem during a journey his parents took. There he was visited by the *magi* – if Matthew is right –, and shortly thereafter, the family fled to Egypt. So clearly, the magi arrived in Jerusalem in the days of the birth. It does not seem likely that Mary and Joseph stayed in Bethlehem for months or even years and waited for the magi there. The opinion prevalent in the earliest church was that the arrival of the magi happened only a few days after the birth of Jesus. Nor is it plausible, as Origen believed, that the holy family returned to Bethlehem two years after the birth of Jesus and then was visited by the *magi*.

It could be objected that in the above argumentation, the information given by Matthew and that given by Luke are mixed up, and that they are not really consistent. According to Luke, Joseph and Mary were resident in Nazareth, and they only came to Bethlehem because of the census. If the Gospel of Luke did not exist and only the Gospel of Matthew were extant, then everybody would believe that Joseph and Mary lived in Bethlehem and had their house there. Matthew does not mention a census, and when the

¹⁸⁰ Like Luke, James also mentions the census, the journey to Bethlehem, and the birth in a cave (a stable). Matthew does not mention these things.

magi arrive, they visit the child not in a cave or stable, but in a "house" (oixia, *domus*, Matthew 2:11). According to Matthew, the holy family only moved to Nazareth after their return from Egypt, because children of Jesus' age were not safe even under Herod's son Archelaus. (Matthew 2:22f.) The apocryphal Gospel of James combines the census with the appearance of the star. Since the earlier version of this gospel is dated to the middle of the 2^{nd} century and thus is very old, too, it is possible that the oldest version of the birth story of the *magi* and the star also contained the census and the birth in the cave.

However that may be, from the information given by Matthew, it is most likely that the birth of Jesus, the appearance of the star, and the arrival of the *magi* occurred around the same time.

The Star Went Ahead of Them...

Zoroaster's prophecy led the magi to Jerusalem first. At this stage they did not know exactly where the child was to be born. They probably only knew that he would be born in Palestine, so they first went to the royal court city. That makes sense. A new king of the Jews would most probably have been born in the family of the king. However, since no child had been born there, and seeing that the magi apparently had the Messiah in mind, Herod assembled his scribes and asked them for the probable place of the Messiah's birth. Following this, the magi were sent to Bethlehem, because of an Old Testament prophecy. Bethlehem is situated a few kilometres to the south of Jerusalem.

Then in verse 9, it is stated that when the magi set out from Jerusalem to Bethlehem

ό ἀστὴρ ὃν εἶδον ἐν τῆ ἀνατολῆ προῆγεν αὐτούς the star they had seen at its rising preceded them

and, in a way, led them there. The being led by a star cannot be taken literally, however, unless the star was a miraculous phenomenon. An astronomical phenomenon does not move by chance; all inhabitants of a geographical area see it in the same place. Some writers understood this verse to mean that the magi saw the star directly in front of them while they were travelling from Jerusalem to Bethlehem. The route runs in the direction north-south. Thus the star would have stood in culmination in the south. But that is improbable. For if the magi really arrived in Jerusalem and Bethlehem at the time of the birth and of the *heliacal rising* of the star, or a few days later, it would have been *bright morning* by the time the star stood in the south. Thus it could still only be seen in the east, in the morning before sunrise.¹⁸¹

¹⁸¹ The only star that can be observed during the day is Venus, if one knows exactly where to look for it.

Put differently: Only several months after its heliacal rising, the star – whichever it was – was far enough from the Sun so that it could be seen in a southerly direction in the night sky. Therefore, in order to have a star positioned in the south, one would have to abandon the convincing insight that the arrival of the magi, the appearance of the star, and the birth of the Messiah happened practically simultaneously. Mary, Joseph, and Jesus would have had to stay in Bethlehem for several months, and the magi would have arrived there only several months after the birth.

It is clear that a different understanding of this "preceding" of the star must be found. The Greek word translated here as "preceding" is *proêgen* ($\pi \rho o$ - $\tilde{\eta}\gamma \epsilon v$). The infinitive of the verb is *proagein* ($\pi \rho o \dot{\alpha}\gamma \epsilon v$). Originally, this word means "to lead forward, to lead on". The question arises, whether the meaning could not simply be "to accompany" here. If the star they had seen in the east was still only visible in the east, it would have risen to the left of them while they were journeying due south, and it was "accompanying" them, as it were.

At first glance, this would appear to make sense. However, the word *pro-agein* is used in only two meanings in the New Testament, either literally in the sense of "going ahead" (e.g. Matt 14:22; 21:9; 21:31) or in the sense of "bringing someone before (a judge)" (e.g. Acts 25:26). Now, although this is not a compelling argument against the meaning "to accompany", one should try, if possible, to stay with the meaning "to go ahead" and get the sense of the text in this way.

However, there is even a more concise and more attractive solution to the problem. Matthew could be using the verb *proagein* in place of the verb *pro-(h)êgeîsthai* (π po $\eta\gamma\epsilon$ ĩ $\sigma\theta\alpha$), which sounds similar in some of its conjugated forms and means "to go ahead of", too, however also has the meaning "to be retrograde" when it refers to the *retrograde or backward motion of a planet*.¹⁸² The verb appears with this meaning in the writings of the Greek-Egyptian astronomer and astrologer *Ptolemy*¹⁸³ as well as the Roman astrologer *Geminus*¹⁸⁴. In fact, it seems that in the language of the New Testament, *proagein* is generally used in place of *pro(h)egeisthai* where the meaning of "to go ahead of somebody" is intended. The verb *pro(h)egeisthai* is used in only one place in the New Testament, in Romans 12:10, and in a different sense, meaning "to give precedence to somebody in something".¹⁸⁵

¹⁸² Liddell/Scott, A Greek-English Lexicon, p. 1480.

¹⁸³ Ptolemy, *Tetrabiblos* III.11, p. 313 (vide also ibid., footnote 4).

¹⁸⁴ Geminus, Einführung in die Astronomie, XII,22ff.

¹⁸⁵ The verb *proagein* does not appear in Romans, while the other books of the New Testament only have *proagein*. In Matthew, the following instances can be referred to: 14:22, 21:9, 26:32 and 28:7.

Before explaining this phenomenon, a remark concerning the history of this interpretation must be made. It seems that Michael Molnar was the first to suggest that *proēgen* should be rendered as "it moved retrograde". However, he wrongly believed that the verb form used by Matthew, namely *proēgen*, belonged to the verb *pro(h)ēgeisthai*, like the participle *pro(h)ēgumenoi* used by Ptolemy. In reality, *proēgen* is imperfect tense of the verb *proagein*.¹⁸⁶ Unfortunately, this linguistic error has lead to a rash refusal of Molnar's suggestion.¹⁸⁷ Since in New Testament language, the verb *proagein* replaces *pro(h)ēgeisthai*, Molnar could still be on the right tack, in spite of his linguistic error.

Thus, the word proagein, "to go before", could very well indicate planetary retrograde motion. To explain this to the lay person, planets do not move with regular speed in the sky, but within a bit more than a year (their socalled synodic cycle) they alternate between forward and backward motion relative to the sphere of the fixed stars. One could also say that within their synodic cycle, they move two steps ahead and then one backwards. But then, how can a verb that means "to go before" refer to a retrograde motion? This is explained by a reverse definition of "forward" and "backward" in ancient astronomy. In order to understand this, the following must be considered: All celestial bodies, including the planets, the Sun, the Moon, and the fixed stars, move over the sky from east to west in the course of a day and night. This means actually, that stars further west go "before" and that stars further east go "behind", an expression that was current in Neo-Assyrian astronomy already.¹⁸⁸ However, related to the fixed stars, they normally move from west to east and only during their retrograde motion from east to west. For retrograde planets, this means that they *catch up* to the stars on their daily path from east to west, and "go ahead" of them. This becomes especially obvious when one observes the rising of stars. During the retrograde motion of a planet one is able to observe, for instance, that certain stars rise just before the planet. But at some point the planet rises earlier than those particular stars. It has thus caught up with them! As against that, planets stay behind the stars during the phase of their direct motion. From this, it is perfectly plausible that the word "going ahead" (prohégeisthai) was used for the retrograde motion of a planet, whereas for the direct motion of the planet the word "staying behind" (hypoleipesthai) was used.¹⁸⁹

Therefore, when Matthew writes that the star went ahead of the magi, he (or his source) apparently misunderstood an astronomical statement about the Star of the Messiah or he re-interpreted it in such a way that it would make sense even to non-professionals in astronomy. The original text probably simply

¹⁸⁶ Michael Molnar, *The Star of Bethlehem*, pp. 90ff.

¹⁸⁷ Roberts, *The Star of the Magi*, pp. 122f.

¹⁸⁸ Rochberg, *The Heavenly Writing*, p. 130.

¹⁸⁹ Geminus (l.c.) demonstrates this beautifully.

read: "The star moved in a forward direction (relative to the fixed stars)", and in present-day terminology that means that it was moving retrograde.

If this interpretation is correct, it identifies the star unequivocally as a planet, because fixed stars do not show motion, either direct or retrograde. Secondly, it can be concluded *that the planet was in its retrograde moving phase during its heliacal rising*.

There is only one planet that moves retrograde at its heliacal rising and for a couple of weeks thereafter, namely Venus. All other planets always move direct at their first appearance. Although, computationally and for the geographic latitude of Jerusalem, Mercury can also be retrograde during its heliacal rising, this cannot be visually observed. After three days at the latest, Mercury will be in direct motion again and will be visible only in the bright morning sky, without any reference stars that could help to detect the planet's relative motion. Thus, the Star of the Messiah can only have been Venus. Incidentally, the heliacal rising of Venus is quite an impressive event, even one of the more spectacular events that can regularly be observed in the night sky. Many ancient peoples have woven myths around it.

... and Stopped Over the Place

The star

 $\dot{\epsilon}\lambda\theta\dot{\omega}\nu$ $\dot{\epsilon}\sigma\tau\dot{\alpha}\theta\eta$ $\dot{\epsilon}\pi\dot{\alpha}\nu\omega$ ου $\tilde{\eta}\nu$ το παιδίον came and stood over where the child was.

A "stopping" of the star can also not be taken literally, when describing an astronomical phenomenon. During the course of a day, all heavenly bodies constantly move from east to west. However, astrology does know of socalled stations of the planets. A planetary station happens when a planet stops relative to the zodiac (or the fixed stars) and changes from their direct motion to retrograde motion or vice versa. The star having stopped would then imply that the magi found the child on the day when the *planet* became stationary and reversed the direction of its movement. No doubt, that the stopping of the star is a very beautiful and clear reference to the fact that this star was, in fact, a planet. Moreover, the mention of the star "stopping" is so close to the mention of its "going ahead", i.e. being retrograde, that this is a strong indicator of the correctness of the assumption that a phase of retrograde motion is meant. Apart from that, Matthew's description is here once more in agreement with the practices of Babylonian birth horoscopes. If the heliacal rising or station of a planet occurred close to a birth, the date of this event was noted in the birth horoscope.¹⁹⁰

¹⁹⁰ Examples of this are found in: Rochberg, *Babylonian Horoscopes*.

Some authors have pointed out that the actual technical term for a planetary station, namely *stērigmos* ($\sigma\tau\eta\rho\gamma\mu\delta\varsigma$), is missing in Matthew's text.¹⁹¹ However, again, it must be noted that Matthew as an astronomical nonprofessional need not know the correct astronomical terminology or does not want to use it. A good reason not to use it is the fact that the term *stērigmos*, which originates from astronomical planetary theories, is extremely technical. With its fundamental meaning, namely "support, fixedness", it would have been completely cryptic for Matthew's target readership, which usually did not know anything about astrology. On the other hand, the statement that the star "stood still" (*estathē*) is understandable, at least in some way, to even the most ignorant reader or listener.

If the star stopped "over (the place) where the child was", it is to be noted that no planet or star can ever be stationary over a *particular* house or a *particular* person. If it is at the zenith, then it is standing above *all* the houses in the area equally, not over a particular one. However, it is not possible that it was at the zenith when the magi arrived, for the same reason that it could not have been in the south. For by then it would have been day and the star would have become invisible. Perhaps the magi turned to the building *over which they saw the star* when they first arrived in Bethlehem. Alternatively, perhaps the text is actually based on the information that the star stopped *on the day* when the magi arrived *at the place of the birth*.

The sentence:

Καὶ ἰδοὺ ὁ ἀστήρ, ὅν εἴδον ἐν τῆ ἀνατολῆ, προῆγεν αὐτους ἕως ἔλθων ἐστάθη ἐπάνω οὖ ἦν τὸ παιδίον.

And behold, the star that they had seen at its rising preceded them, until it came and stopped over (the place) where the child was.

would be astronomically more correct when paraphrased:

And behold, the star that they had seen at its rising was in retrograde motion, until it became stationary on the day they arrived at the place where the child was born.

In this way it is also clear that between the heliacal rising of this star and its station, only a few days could have elapsed. The magi arrived in Jerusalem at the time of the star's appearance, and in Bethlehem at the time of its station. Thus, this is further support for this author's suspicion that the star must have been either Mercury or Venus. Mercury becomes stationary for two to three days, Venus about two weeks after its heliacal rising.¹⁹² It is interesting in this connection that, traditionally, the feast of the birth is celebrated on the 25th December, and the arrival of the magi by the 6th January. There are 12 days in between. Does this hide some ancient knowledge, that the Star of

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¹⁹¹ Vide Roberts, *The Star of the Magi*, p. 124.

¹⁹² Concerning Mercury, vide p. 99.

the Messiah stopped 12 days after its heliacal rising? If yes, this would be a further pointer to Venus.

Even when the magi felt "great joy" ($\chi \alpha \rho \dot{\alpha} \nu \mu \epsilon \gamma \dot{\alpha} \lambda \eta \nu$) on seeing the star, this points to Venus. After the Sun and the Moon, Venus is the brightest of all heavenly bodies, brighter than all the other stars together. Which planet is more beautiful and can fill the heart of one looking at the sky with more joy than Venus? In the apocryphal Gospel of James, it is stated that the star was so bright that all others paled by comparison.¹⁹³ Venus is certainly like that. At the time of its greatest brightness, close to its two stations, when it changes from its evening to its morning star phase, it can even cause a shadow on the earth, if there is no Moon and no other lights intrude. Who has not already been touched by joy at seeing the bright evening or morning star? In addition, the "great joy" could be astrologically related to Venus or a conjunction of Venus with Jupiter.

Most writers consider Jupiter to be the Star of the Messiah. However, after the previous discussion, Jupiter clearly cannot be considered. Immediately after mentioning the heliacal rising, Matthew speaks of the retrograde motion and only then of a station. In the case of Jupiter the reverse is the case. At its heliacal rising it moves directly and takes four months until it becomes stationary. It becomes retrograde only then. And then it takes another couple of months until it becomes stationary again and resumes its direct motion. As has been stated already, it is improbable that the Holy Family would have remained in Bethlehem this long!

It is surprising that a writer like Molnar recognises that the text speaks of a heliacal rising, and of retrograde motion, but then mistakes these clear indications for Venus and insists on Jupiter. The question to be answered by Molnar is: Where does the text mention the first station of Jupiter, which would have had to have taken place before its retrograde motion? The answer is: nowhere. It never took place, and therefore, the Star of Beth-lehem cannot have been Jupiter, it must have been Venus. Jesus was born at a heliacal rising of Venus!

The facts are presented quite correctly in *Felix Mendelssohn-Bartholdy's* unfinished oratorio opus 97 (1847)

Recitative

Da Jesus geboren ward zu Bethlehem im jüdischen Lande, da kamen die Weisen vom Morgenlande gen Jerusalem und beteten ihn an.

When Jesus was born at Bethlehem in the land of the Jews Wise men came from the orient to Jerusalem And worshipped him.

¹⁹³ "The magi answered: 'We have seen that a very big star shone among these stars, and it made them so pale that they did not shine anymore.'" (Gospel according to James, 21:2)

Trio

Wo ist der neugeborne König der Juden? Wir haben seinen Stern gesehen und sind gekommen, ihn anzubeten.

Where is the new-born king of the Jews? We have seen his star and have come to worship him.

Choir

Es wird ein Stern aus Jacob aufgehn und ein Scepter aus Israel kommen, Es wird ein Stern aus Jacob aufgehen, der wird zerschmettern Fürsten und Städte. Wie schön leuchtet der Morgenstern! (sic!) O welch ein Glanz geht auf vom Herrn, uns Licht und Trost zu geben! Dein Wort, Jesu, ist die Klarheit, führt zur Wahrheit und zum Leben. Wer kann dich genug erheben? A star shall rise from Jacob And a sceptre come from Israel A star shall rise from Jacob That will smash princes and cities. How beautifully shines the morning star! (sic!) O what a radiance arises from the Lord To give us light and comfort! Your word, Jesus, is clarity, It leads to truth and to life.

Who can lift you high enough?

Another beautiful example is *Philipp Nikolai's hymn* "Wie schön leuchtet der Morgenstern" ("How lovely shines the morning star", 1599), in the new rendition of *Johann Sebastian Bach* (1705, BWV 739):

Wie schön leuchtet der Morgenstern Voll Gnad und Wahrheit von dem Herrn, Die süße Wurzel Jesse! Du Sohn Davids aus Jakobs Stamm, Mein König und mein Bräutigam, Hast mir mein Herz besessen ... How lovely shines the morning star Full of grace and truth from the Lord, The sweet root of Jesse!

You, son of David from Jacob's tribe

My king and my bridegroom,

Have taken possession of my heart ...

There are also less literal versions of the same hymn in English hymn books.¹⁹⁴

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¹⁹⁴ Common Service Book of the Lutheran Church #349 ("O Morning Star, so pure, so bright"); The United Methodist Hymnal Number 247 ("O Morning Star, how fair and bright").

The following anonymous Lutheran hymn from the 16th century is notable because of its reference to light shining in the dark (John 1:9):

O Christe! Morgensterne, leucht uns mit hellem Schein, schein uns vons Himmels Throne an diesem duncklen Ort mit deinem reinen Wort.¹⁹⁵

O Christ, Morning Star give us light with bright radiance, shine for us from the throne of heaven in this dark place through your pure word.

Why the Star has no Name

The question arises why Matthew was not more precise in identifying the star, and why he does not name the planet or fixed star. The meaning of the Greek word *astêr* is quite indefinite. It can mean any star in the sky – a fixed star, a planet, a comet, and in astrology possibly even the Moon or the Sun.

If the star had been an unusual phenomenon, it would be plausible that no word for it would even have existed. Matthew simply did not know how else, or how more precisely he could have expressed himself. However, since it has been found that the star was a perfectly natural and easy to identify feature, Matthew's reluctance to name the star must be explained in a different way. There are plausible reasons for this reluctence.

The specific naming of the planet or star was avoided because its name was associated with the name of a heathen deity. Jews and Christians had, and still have, ambivalent feelings towards astrology. In the Old Testament there are verses interpreting astrology as religious worship of stars (astrolatry) and as such it is completely rejected as idolatry. In fact, the Bible avoids the very mention of planets as far as their names stem from heathen deities. In Late Antiquity and the early Middle Ages, pagan names of planets were even eliminated in the Hebrew language and replaced by "benign" names.¹⁹⁶

The Bible verses naming planets can be counted on the fingers of one hand. Amongst these verses is Amos 5:26 in which the planet of law, Saturn, is named as an idol of the Jews. Shying away from names of planets goes even to the extent that many English translations of this verse avoid referring to Saturn by its name. The otherwise accurate *New American Standard Bible* (NASB) version of Amos 5:26 leaves the names untranslated:

¹⁹⁵ According to: Gabriel Wimmers ausführliche Lieder-Erklärung (1749), p. 412.

¹⁹⁶ Stieglitz, "The Hebrew Names of the Seven Planets".

וּנְשָׁאֶהֶם אֵת סְכּוּת מַלְכְּכֶם וְאֵת כִּיוּן צַלְמֵיכָם כּוֹכַב אֱלֹהֵיכָם אֲשֶׁר צֲשִׁיתֶם לְכָם You also carried along Sikkuth your king and Kiyyun, your images, the star of your gods which you made for yourselves.

Only the *International Standard Version* and the *Amplified Bible* uses the name of the planet:

And you carried the tent of your king – and Saturn, your star god idols that you crafted for yourselves. (ISV)

[No] but [instead of bringing Me the appointed sacrifices] you carried about the tent of your king Sakkuth and Kaiwan [names for the gods of the planet Saturn], your images of your star-god which you made for yourselves [and you will do so again]. (Amplified Bible)¹⁹⁷

Kijun, in correct vocalisation *Kaiwān*, is the planet Saturn. In cuneiform literature, it appears as *Kajjawānu*, "the steady one". The identity of *Sikkūt* is less certain. In some cuneiform texts, an astral deity of the name of SAG. KUD is mentioned, often besides *kayyawānu* (SAG.UŠ). In Ugarit, the same deity was identified with the Mesopotamian god *Ninurta* and thus with Saturn. For this reason, scholars believe that *Sikkūt* – or probably more correctly *Sakkūt* – is only another deity that is identified with the planet Saturn.¹⁹⁸ The verse from Amos indicates that Saturn deities of the name of *Sakkūt* and *Kaiwān* were worshipped in the form of idols. The verse could thus be translated as follows:

You have carried *Sakkūt*, your king, and *Kaiwān*, your idols, the planet of your god (or: your gods) that you have made for yourselves(, namely Saturn).

Even in New Testament times, apparently no-one was aware that Kaiwan/ Kijun in fact meant Saturn. In the *Septuagint*, the Greek translation of the Old Testament, the name *Kaiwān* (Ccrr) was rendered wrongly as *Rhaiphan* (Pauqav), probably as a result of a confusion of letters. The same holds for Acts 7:43, where the same verse is quoted, but the name is rendered as *Rhaiphan*, *Rhemphan*, *Rhomphan* etc.¹⁹⁹ Obviously, the name and identity of the

¹⁹⁸ Schmidt, "Die deuteronomistische Redaktion des Amosbuches", p. 190; http://www.bibelwissenschaft.de/nc/wibilex/das-bibellexikon/details/quelle/ WIBI/referenz/25858/cache/b535a3dacdbe0ed433ed32ce02efc2aa/; Paul/Cross, *A Commentary on the Book of Amos*, p. 197f.

¹⁹⁹ Hebrew *Kaiwan* (written *kjwn* without vowels in Hebrew writing, thus also sometimes vocalised *Kijun*) was first transcribed as *Kaiphan* (K α i $\phi\alpha\nu$) in Greek. The ϕ (=*ph*, *f*) was chosen because there is no *w* in the Greek alphabet. *Rhaiphan* (P α i $\phi\alpha\nu$)

¹⁹⁷ The Holman Christian Standard Bible mentions Saturn in a footnote.

J. Cooley dismisses the identification of *kijūn* with *kajjawānu* and Saturn, because the latter was not a relevant deity in Assyria. (Cooley, *Poetic Astronomy in the Ancient Near East*, p. 239) However, this is not a valid argument. It is well attested in ancient authors that the god Saturn was important to the Jewish people. Vide this author's explanations on pp. 132f. Furthermore, the name *kaiwan* could have been introduced in Palestine long before Amos.

star was no longer known to the authors of the Septuagint and the Acts. This could be explained by the fact that in Jesus' time, the name commonly used for Saturn was *Shabbetai* (שבתאי).

Still, even in the Septuagint, the connection with Saturn was not completely lost. It renders Amos 5:26 as follows:

καὶ ἀνελάβετε τὴν σκηνὴν τοῦ Μολοχ καὶ τὸ ἄστρον τοῦ θεοῦ ὑμῶν Ραιφαν, τοὺς τύπους αὐτῶν, οὓς ἐποιήσατε ἑαυτοῖς.

And you accepted the tent of the Moloch and the star of your god [of the name of] *Rhaiphan*, your idols that you have made for yourselves.

Thus, *skt mlkkm*, which further above has been translated as "*Sakkūt*, your king", is here rendered as "the tent of Moloch". Greek and Roman authors identified Moloch with Kronos and Saturn.²⁰⁰

Another interesting reference is 2 Kings 23:5, where the old name of Jupiter, namely *Baal*, is used. *Young's Literal Translation* renders it as follows:

וְהִשְׁבִּית אֶת-הַכְּמָרִים ... וְאֶת-הַמְקַטְרִים לַבַּעַל לַשֶּׁמֶשׁ וְלַיָּרֵם וְלַמַוָּלוֹת וּלְכֹל צְבָא הַשְׁמַיִם.

And he hath caused to cease the idolatrous priests ... and those making perfume to Baal, to the sun, and to the moon, and to the planets, and to all the host of the heavens.

However, since *Baal* is listed together with other celestial bodies, it is obvious that he also stands for a celestial body. Now, Epiphanius (4th cent.), who knew Hebrew, states that *Baal* was an older name of the planet Jupiter. (*Adversus Haereses (Panarion)* 15,2) This makes very good sense, since the oriental weather god Baal was identified with Jupiter by the Greeks and Romans. Since the 1st century, the cult of *Iupiter Dolichenus* was particularly popular in the Roman army. It went back to the cult of Baal in the east Anatolian city of Doliche (near Gaziantep). Thus, verse 2 Kings 23:5 should be actually rendered be as follows:

And he hath caused to cease the idolatrous priests ... and those making perfume to Jupiter (Baal), to the Sun, and to the Moon, and to the planets (or constellations ?)²⁰¹, and to all the host of the heavens.

instead of *Kaiphan* can be explained as the Greek K was in later copies taken for a P(=Rh) by mistake.

²⁰⁰ Children were allegedly sacrificed to Moloch. Ancient authors report that the Phoenicians sacrificed children to Kronos or Saturn. (Diodorus Siculus, *Bibliotheca historica* 20.14; Plutarch, *De superstitione* 171).

²⁰¹ *mazzaloth*. The exact meaning of this term in this context is not known. In later texts it could be translated as "zodiac signs". However, the zodiac signs were not known yet in the 6th century BCE, when the book 2 Kings was written.

So, could Jupiter-Baal have been the Star of Bethlehem? If so, it is at least understandable that Matthew did not want to expressly mention the name of a heathen deity.

Another planet that is mentioned in the Bible, even sometimes in the New Testament, is Venus. In the Old Testament, she appears as the "Queen of Heaven" (מַלְכָּת הַשָּׁמֵים) and under the name of Ashteret (מַלְכָּת הַשָּׁמֵים) (Judges 2:13; 10:6; 1 Samuel 7:4; 12:10) It also becomes clear that Jupiter-Baal and Venus-Ashteret were the most popular planetary deities amongst the idolaters, e.g. in the following verse:

וַיָּסִירוּ בְּגֵי יִשְׂרָאֵׁל אֶת־הַבְּעָלִים וְאֶת־הַעַּשְׁתָּרָת וַיַּעַבְדָוּ אֶת־יְהָוָה לְבַדְּו: And the sons of Israel remove the Baals and the Astartes (i.e. the idols of the two gods) and serve Yahweh alone. (1 Samuel 7:4)

The plurals of the two names of deities are explained by the fact that they were worshipped in the form of cult statues and cult objects.

Another name of Venus was apparently Asherah (אַשֶׁרָה). For in 2 Kings 23:4, immediately before the verse concerning Jupiter-Baal, the Sun and the Moon, it says:

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וִיִצְו הַמֶּׁלֶךְ אֶת־חִלְקִיָּהוּ הַכּּהָן הַגָּזּוֹל וְאֶת־כֹּהַנֵי הַמִּשְׁנָה וְאֶת־שׁמְרֵי הַסָּרְ לְהוֹצִיא
מַהֵיכַל יְהוָה אֵת כָּל־הַכֵּלִים הַצֲשׂוּיִם לבַּעַל וְלֵאֲשֵׁרָה וּלְכָל צְבָא השָׁמָיִם וְיִשְׁרְפֵׁם
מַחוּץ לירוּשָׁלֵם בְּשַׁדְמָוֹת קִדְרוֹן וְנָשָׂא אֶת־צְפָרָם בֵּית־אֵל:
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Then the king commanded Hilkiah the high priest and the priests of the second order and the doorkeepers, to bring out of the temple of the Lord (Yahweh; D.K.) all the vessels that were made for Baal, for Asherah, and for all the host of heaven; and he burned them outside Jerusalem in the fields of the Kidron, and carried their ashes to Bethel. (2 Kings 23:4, NASB; cf. 21:3)

However, where the planets appear in a context that has nothing to do with idolatry, the Bible avoids the names of heathen gods. E.g., Isaiah says that "a light has arisen in the darkness" (אָרָה בַּהֹשֶׁר אוֹרָה Isaiah 58:10; cf. John 1:9). In another place, he designates Venus as "the shining one, the son of the dawn" (אָרָה בָּהֹשֶׁר אוֹר בָּרִשָׁר הָ הָשׁרָסָ, הַשׁרָסָס, Isaiah 14:12-15). In the New Testament, Venus is mentioned as the "shining morning star" (ὁ ἀστὴρ ὁ λαμπρὸς ὁ πρωϊνός, Rev. 22:16; cf. 2:26) and as the "bringer of light" (φωσφόρος, *lucifer*, 2 Peter 1:19). These instances will be discussed more carefully later (pp. 248ff.).

Very interesting are the Hebrew names of the planets that are attested in non-biblical sources:

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²⁰² The Bible vocalises the name as Ashtoret (עַשָּׁהְרָת; 1 Kings 11:15) after the model of *boshet* (בְּשָׁת), "shame", which, however, is not correct.

	traditional	older name acc. to Epiphanius ²⁰³
Sun	Hammāh (המה)	Hammāh ($\eta\mu\alpha$ = המה)
		Šämäš (σέμες = שמש)
Moon	Lebānāh (לבנה)	Lebānāh (מא מא $\beta \alpha \nu \dot{\alpha} = - \beta \dot{\alpha} \nu \dot{\alpha}$
		Yārēah (ἰέρεε = ירה)
Mercury	Kōkāb (כוכב)	Ochomod (χωχὲβ ὀχομόδ)
Venus	(Kōkab) Nōgah (כוכב נוגה)	Zerua (ζερούα = זרועה ?)
	Kōkäbät (כוכבת)	Luēt ($\lambda o \upsilon \eta \theta = \delta ?$)
	Kōkabtāh (כוכבתה)	
Mars	Ma'adīm (מאדים)	Okbol (χωχὲβ ὀκβόλ)
Jupiter	Sedeq (צדק)	Baal (χωχέβ βάα λ = בעל)
Saturn	Šabbetay (שבתאי)	Šabbet (χωχέβ σαβή θ = שבת)

The names mentioned by Epiphanius are older, although not all of them are attested before him. The traditional names are first mentioned in the *Babylonian Talmud*, whereas the Old Testament does not know them yet. E.g., although there is often talk of *şedeq*, i.e. the "righteousness" of God, and although its manifestation is sometimes compared to the appearance of a star, *şedeq* is never the name of a star. According to the *Babylonian Talmud* 156, Rab Abbā Arīkā, who lived in 200 CE, allegedly identified *şedeq* in Isaiah 41:2 as the planet Jupiter:

מִי הַעִּירֹ מַמַּזְרָה צֶדֶק יַקְרָאָהוּ לְרַגְלֵו יַהֵּן לְפָגֵיו גוֹיִם וּמְלָכֵים יַׁרְדָ ...

τίς ἐξήγειρεν ἀπὸ ἀνατολῶν δικαιοσύνην, ἐκάλεσεν αὐτὴν κατὰ πόδας αὐτοῦ, καὶ πορεύσεται; δώσει ἐναντίον ἐθνῶν καὶ βασιλεῖς ἐκστήσει ...

Who caused Righteousness (i.e. the Persian king Cyrus) to ascend from the rising (S: from the Orient),

[who] calls him to his feet,

[who] hands nations over to him and makes him tread down kings? (Is 41:2)

Current translations of this verse vary considerably. This author mostly follows the syntactical interpretation of the Septuagint. There is talk of a rising of *sedeq*, i.e. of "Righteousness". Could it be the name of the planet Jupiter here? However, it is interesting that the Septuagint apparently does *not* interpret *sedeq* as the name of a planet, but renders it in its literal sense as "justice" ($\delta \iota \kappa \alpha \iota o \sigma \upsilon \eta$), in a context that has an obvious astral connotation. Nevertheless, even if *sedeq* was not known as a planet's name in Isaiah's time, it seems that the rising of the Persian king, who brought the Jews freedom, is compared to the rising of a star.

In Isaiah 58:8-10, *sedeq* is also used in a context with astral connotation:

²⁰³ Epiphanius, Adversus Haereses (Panarion) 16,2.

8 אַז יִבָּקָע כַּשֵׁחַר אור ווּאַרָכָתָדָ מָהָרָה תִּצְאָח והלך לפגיד צדמך כבוד יהוה יאספר: 10 ... וזרח בַּחֹשֵר אורד ואַכַלתָד כַּצהַרִים:

τότε ραγήσεται πρόιμον το φῶς σου, καὶ τὰ ἰάματά σου ταχὺ ἀνατελεῖ, και προπορεύσεται έμπροσθέν σου ή δικαιοσύνη σου, και ή δόζα τοῦ θεοῦ περιστελεῖ σε

τότε άνατελεῖ ἐν τῷ σκότει τὸ φῶς σου, καὶ τὸ σκότος σου ὡς μεσημβρία.

(8) Then your light will break forth at the time of (or: like) the dawn, and your healing will speedily *shine forth* (or: spring forth);

Your righteousness (sedeq) will go before you, and the glory of Yahweh will be your rear guard! ...

(10) ... Then your light will rise in darkness, and your gloom will become like midday! (Isaiah 58:8 and 10)

Besides the Hebrew text, the wording of the Septuagint, which very clearly echoes Matthew's Star of Bethlehem, is also given. In the above verses, it is God who speaks to the human individual. The light of the person addressed, which breaks forth in the morning, i.e. rises heliacally, can apparently be identified with his "righteousness" (sedeq) that "goes before him". This is also reminiscent of the Star of Bethlehem, which goes before the magi. Are these verses alluding to Jupiter, who was later given the name sedeq? However, sedeq cannot be intended as a planet's name here because it is used with a possessive suffix ("your righteousness", sidqeka). This is even more obvious in Isaiah 62:1:

למַעַן ציון לא אָחַשֶׁה וּלמַעַן יִרוּשַׁלָם לָא אָשָׁקוט עַד־יָצָא כַנֹּגָה צָדָקָה וִישוּעַתָה כַּלַפִּיד יָבַעָר:

Διὰ Σιων οὐ σιωπήσομαι καὶ διὰ Ιερουσαλημ οὐκ ἀνήσω, ἕως ἂν ἐξέλθῃ ὡς φῶς ἡ δικαιοσύνη μου (sic!), τὸ δὲ σωτήριόν μου ὡς λαμπὰς καυθήσεται.

For Zion's sake I will not keep silent, and for Jerusalem's sake I will not keep quiet, until her (i.e. Zion's or Jerusalem's) righteousness (sedek) goes forth *like brightness* (nogah), and her salvation like a torch that is burning.²⁰⁴ (Isaiah 62:1)

Interestingly, this verse combines $n\bar{o}gah$, the traditional name of Venus, with sedeq, the traditional name of Jupiter. This again proves that the two terms are not used as planet names. Thus, it seems that Dwight Hutchison in his book The Lion Led the Way is not right in his assumption that the traditional planet names were already known in Old Testament times. Of course, it is possible that the names of Jupiter and Venus were inspired by the verses from Isaiah quoted above. Perhaps also from the ones cited below.

²⁰⁴ Septuagint: "until the light of my (God's) righteousness goes forth".
Nevertheless, it seems that Isaiah is alluding to the heliacal rising of a planet. However, it is more likely Venus than Jupiter, also in the following verses, which are addressed to the city of Jerusalem:

קּוּמִי אָוֹרִי כִּי בָא אוֹרֵך וּכְבָוד יְהָוָה עָלַיִדְ זְרָח:

Φωτίζου φωτίζου, Ιερουσαλημ, ήκει γάρ σου τὸ φῶς, καὶ ἡ δόξα κυρίου ἐπὶ σὲ ἀνατέταλκεν.

(1) Arise, shine; for your light has come, and the glory of Yahweh has risen upon you.

כְּשָׁרֶה הַחֹּשֶׁךְ יְכַסֶּה־אֶׁרֶץ וַעְרָפֶל לְאַמֵים כְּשָׁרִה הַזְרַח יִהוָה וּכְבוֹרוֹ עַלִיָדְ יַזְרַח יִהוָה וּכְבוֹרוֹ עַלִיִדְ יַזְרַח יִהוָה

ίδοὺ σκότος καὶ γνόφος καλύψει γῆν ἐπ' ἔθνη.

έπὶ δὲ σὲ φανήσεται κύριος, καὶ ἡ δόξα αὐτοῦ ἐπὶ σὲ ὀφθήσεται.

(2) For behold, darkness will cover the earth and thick darkness the peoples; but Yahweh will rise upon you, and His glory will appear upon you.

וְהָלְכוּ גוּיִם לְאוֹרֵךְ וּמְלָכִים לְּבֹּגַה זַרְתֵך:

καὶ πορεύσονται βασιλεῖς τῷ φωτί σου καὶ ἔθνη τῃ λαμπρότητί [τῆς ἀνατολῆς (var.)] σου.

(3) And nations will walk to your light, and kings to the brightness (nogah) of your rising. (Isaiah 60:1-3)

Here again, the term $n\bar{o}gah$ is used, which later became the name of Venus. Again, this verse is strongly reminiscent of the Star of Bethlehem and the *magi* who follow it.

Particularly interesting is verse 1, where the rising planet is "identified", as it were, with Yahweh. Later, it will be shown that the pillar of fire and cloud that goes ahead of the Israelites, is sometimes called God himself, but sometimes only "His angel" (מַלָאָך הָאָלהָים, Exodus 14:19). And in the story of Moses and the bush, at first it is "the angel of Yahweh" (מַלָאָך יְהוָה), Exodus 2:3) that appears in the bush, but it is God (**lohîm*) himself who is speaking out of the bush. Thus, the above verse could also actually refer to Yahweh's angel rather than Yahweh himself.

It is interesting that in the gnostic text *Pistis Sophia*, the planet Jupiter appears under the name of Sabaoth (אכם אסידי), which obviously alludes to the Old Testament title "Yahweh of the Hosts" (יְהָנָה צְּרָאוֹת, *Yahweh* s^ebāōth).²⁰⁵ A gnostic gem has the god Jupiter with thunderbolt and an eagle depicted on one side, and the name *Iao Sabao* (IA Ω / Σ ABA Ω) on the other.²⁰⁶ These names are also found on other gems. Apparently, the planet Jupiter was identified with Yahweh Sebaoth. However, it should not be forgotten that

²⁰⁵ *Pistis Sophia* (ed. Carl Schmidt), p. 361, line 18; also p. 363, lines 21f.; German translation in: Schmidt, *Koptisch-gnostische Schriften*, p. 238, lines 5 and 33f.

²⁰⁶ Matter, *Histoire critique du gnosticisme* (planches), Planche IX, 1.

these objects were made in the 2^{nd} and 3^{rd} centuries CE, whereas the text of Isaiah was written in the late 6^{th} century BCE. For this reason, it should not be concluded that the latter also refer to Jupiter. As a whole, the clues that point to Venus are stronger.



There is also another point to be considered with the traditional Hebrew planet names. The name of Mercury is simply $K\bar{o}k\bar{a}b$, i.e. "star", and for Venus, there are the names $K\bar{o}kab n\bar{o}gah$, "star of the splendour", as well as $K\bar{o}kebet$ and $K\bar{o}kab$ $t\bar{a}h$, the latter two being feminine forms of "star" ($k\bar{o}k\bar{a}b$). Thus one could say that Mercury and

Venus are called "the star" and "the she-star".²⁰⁷ However, Jesus' native language was not Hebrew, but Aramaic (Syriac), and in this language, Venus was simply called "the star". The Aramaic word for "star" can be either masculine, *kauk^ebā/kaukab* (حمد/ حمد), or feminine, *kaukabtā* (حمد المدد). The same holds for the corresponding Arabic word (feminine *kaukabtā* (*kaukabatu* or masculine الكوكب *al-kaukabu*). In the Aramaic Bible, Matthew uses the masculine form (حمد المحد).²⁰⁸ Now, although Matthew writes Greek and the expression "*his* star" (αὐτοῦ ὁ ἀστήρ, could, in principle, refer to any celestial body, it is still possible that Matthew's text should be understood in the context of a tradition where the word "star", *kauk^ebā*, expressly referred to the planet Venus. Thus also from this point of view, Venus is the most likely candidate for the Star of Bethlehem.

Now, in talking of the "star", Matthew obviously refers the Old Testament star prophecy Numbers 24:17:

דְרַך כּוֹכָב מִיַּעֲקֹב

άνατελεῖ ἄστρον ἐξ Ιακωβ...

A star shall come forth from Jacob... (Numbers 24:17) a star rises from Jacob ... (Septuagint)

It is generally assumed that here the word $k\bar{o}k\bar{a}b$ is not to be understood as the name of Mercury or Venus, but must be translated in its generic meaning as "a star". This is, of course, the most obvious assumption. However, it is not absolutely certain. Also, the question must be asked if Balaam really did not know what star he was talking about. Unfortunately, it cannot be proven that in Old Testament texts, $k\bar{o}k\bar{a}b$ was used to denote Venus. The word appears mostly as a plural and only twice as a singular in the places that have been quoted above, namely Numbers 24:17 and Amos 5:26. Amos obviously uses the word in its generic meaning "star".

²⁰⁷ For kōkāb and kōkäbät, vide Jastrow, A Dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic Literature, I, p. 619.

²⁰⁸ Payne Smith, *A Compendious Syriac Dictionary*, p. 208, gives the following meanings for the word: "the planet Venus; a star, planet".

There is also another possible explanation for the fact that Matthew does not call the "star" by its name. Since Balaam did not call it by its name, Matthew could have chosen the same general expression in order to make the connection between the Star of Bethlehem and the old prophecy *more explicit*. Moreover, the secret-mongering that was typical for contemporary mystery cults may have played a part too. Although everybody knew which star they were talking about, they did not mention its name. A truth that is not openly enunciated but only intimated may have been considered spiritually more powerful.

However, even in the Greek language of Jesus' time, it was not usual to refer to the planets using the names of their gods. Until the 5th century BCE, the Greeks were aware of only one planet, namely Venus, and they did not refer to her as the goddess of love, but as the morning star Heosphoros (Έωσφόρος), "the bringer of the dawn", and as the evening star Hesperos ($E\sigma\pi\epsilon\rhoo\varsigma$). The knowledge that there are four more planets and that they could be assigned to gods who used them to express their will, is only found since the time of Plato, and it is obvious that the Greeks took it over from Babylonian sky gazers.²⁰⁹ The idea to link the planets with gods was actually foreign to the Greeks. In addition, they were not sure which god or goddess should be assigned to which planet, because there was no unambiguous correlation between Babylonian and Greek gods. For this reason, the older set of Greek planet names had nothing to do with gods. Jupiter was called *Phaethon* ($\Phi \alpha \dot{\epsilon} \theta \omega \nu$), and Saturn *Phainon* ($\Phi \alpha \dot{\nu} \omega \nu$), both of which can be rendered as "the shining one". Mercury was called *Stilbon* ($\Sigma \tau i \lambda \beta \omega v$), "the glittering one", and Mars Pyroeis (Πυρόεις), "the fiery one". For Venus, the above-mentioned names were used, as well as *Phosphoros* ($\Phi\omega\sigma\phi\phi\rho\sigma_c$), "the bearer of light" or "bringer of light".²¹⁰ It was only in the Roman imperial period, when Oriental cults and astrology flourished, that the divine names of the planets became prevalent.

Ammianus Marcellinus reports that at the entry of Emperor Julian into Antioch in the year 363 CE, a festival dedicated to Adonis was just being celebrated, and people shouted: "the salvific star has appeared in the east"

Mercury šihtu (GU4.UD, "attack, rising").

²⁰⁹ Cumont, "Les noms des planètes et l'astrolatrie chez les Grecs".

²¹⁰ Incidentally, the Babylonians of the Hellenistic period did not call the planets after gods either:

Venus was not called *Ištar*, but *Delebat* (DILI.BAD, exact meaning unknown; DILI means "alone", BAD "to be remote");

Jupiter kakkabu peşû (MUL.BABBAR, "the white star");

Saturn kajjawānu (GENNA, "the steady one");

Mars *şalbatānu* (AN, meaning unknown);

A lot more could be said about the logograms of the names, see e.g. in: Koch-Westenholz, *Mesopotamian Astrology*, pp. 120ff; Kasak/Veede, "Understanding Planets in Ancient Mesopotamia", in: *Folklore*, vol. 16, 2001, Tartu.

(salutare sidus inluxisse eois partibus)²¹¹. Since Adonis was the lover of Aphrodite/Venus, the star referred to can only have been Venus as the morning star, and the festival must have been celebrated around the date of her heliacal rising. Interestingly, the star was not called by its name, but was just referred to as "the star". Thus, the question arises whether the magi could have been referring to "the star" in a similar way. In the case of Venus, this manner of speaking would have been particularly appropriate. Venus is by far the brightest star, after the Sun and the Moon, and she played a paramount part in ancient Oriental astral religions. She is "the star" par excellence. In Babylon she was called *Ishtar* (*Ištar*), which actually is not only the name of a goddess, but also the common Akkadian word for "goddess". The Hebrews called her Ashteret (\forall wurden (\forall strt = Greek Astartē). In Arabia and Ugarit the planet of Venus was assigned to the god *Athtar* (*'ttar*; the *-th-* or *t* is pronounced like English *th*) and his wife *Athtart* (*'ttart*). Incidentally, the phonetic similarity between the Semitic name Athtar or Ashtar and the Greek word aster, "star", is not a mere accident and perhaps the latter is a Semitic loanword. However, this loanword would be extremely old, even older than the Greek language, since it also appears in several other Indo-European languages.²¹²

From all these considerations it appears that Matthew's "star" $(ast\bar{e}r)$ could very well have been a planet, and the best candidate would have been Venus.

Summary

The above investigation of Matthew 2 has led this investigation to the following conclusions:

1. The birth of Jesus was believed to have coincided with the appearance of some "star". Moreover, it was believed that the appearance of the "star" coincided with the arrival of *magi* who were searching for the child. The latter indicates that either they did not come from very far (e.g. from Syria/Jordan) or that they had *calculated* the appearance of the star *beforehand* and scheduled their arrival in Jerusalem exactly for the time of its first visibility. In the latter case, the current idea that the *magi* had seen an unexpected appearance of a star in their home country and had departed only after observing it would be wrong. Also, it follows that the star must have been a regular and well-known phenomenon like

²¹¹ Ammianus Marcellinus, Res gestae 22.9.14-15; quoted below on pp. 246f.

²¹² Cf. Latin *stella* (< **ster-ula*), English *star*, Sanskrit *stṛ- (tṛ-)*. The etymology of the Semitic name *Attar/Aštar* is not known, however it seems to be derived from an old Semitic verb '*attara*. The consonant *t* inserted aver the *t/š* seems to hint at a T stem with passive or reflexive meaning (with a metathesis of *t* and *t*: '*attar* < *'*attar*). Unfortunately, the meaning of this verb remains a mystery. In Arabic, '*attara* (*attara*) means "to stumble", which does not seem to make any sense.

a planet or a fixed star. Only the behaviour of planets and fixed stars could be calculated in advance, whereas comets and novae were unpredictable.

- 2. Matthew's description refers to the heliacal rising of a star, i.e. its first appearance in the morning, shortly before sunrise, after a period of invisibility. The assertion found in some modern authors that the term *anatolē* used by Matthew refers to an evening (acronychal) rising is wrong.
- 3. The star seems to have been in retrograde motion at its heliacal rising. This is indicated by the statement that the star "went before" (*proēgen*; inf. *proagein*) the *magi*. This expression is reminiscent of the astronomical term for planetary retrogradation. Here, it must be taken into account that in New Testament language, the verb *proagein* replaces *prohegeisthai*. Venus is the only planet that can be observed in retrograde motion immediately after its heliacal rising.
- 4. The star becomes stationary shortly after its heliacal rising. Here again, Venus is the only planet that fits.
- 5. Matthew does not mention the name of the "star", an obvious reason being the fact that the names of heathen deities were taboo amongst Jews and Christians. Interestingly, however, the name of Venus in Hebrew and Aramaic, the mother tongue of Jesus, was simply "the star" or "the she-star" (*kōkāb/kōkäbät* in Hebrew and *kaukab/kaukabta* in Aramaic). Thus, Jesus could originally have been associated with this planet. Also interesting is the fact that the Adonis festival of Antioch was apparently celebrated on the day of the first appearance of Venus and began with the shout of joy: "The salvific star has appeared". The name of the star was not explicitly mentioned. In the case of Venus, this is not really astonishing, because she is the *brightest* and *most beautiful* of all stars, even the "star" par excellence.

In short: The description given by Matthew seems to refer to the appearance of Venus as the morning star.

Current and Traditional Theories

After a careful study of Matthew's story, this would be a good point to begin evaluating existing theories about the Star of Bethlehem and see whether they accord with the information given by the gospel. Naturally, it is not possible to deal here with all the theories that have been put forward in the past. Also, some theories that are closer to the solution proposed by this author can only be discussed at a later stage of this investigation.

Comets

In the 2nd century, church father Origen first made the assumption that the Star of the Bethlehem could have been a comet.²¹³ Every year at Christmas time, many depictions show the Star of the Messiah with the tail of a comet. And it surely makes sense at first glance that a comet with its tail could have been suitable to literally show the magi their route. Does it not look like an arrow? All who saw the comet Halley-Bopp in 1997 would understand that. Nevertheless, the "arrow" of a comet changes its direction significantly while it is visible, even in the course of an evening or morning.

The present investigations up to this point have shown that only celestial phenomena that could be calculated ahead of time in those days should be considered for the Star of Bethlehem. However, comets appeared unexpectedly and could not be predicted by ancient astronomers. Only in 1705 did the British astronomer Edmond Halley (1656-1742) discover that certain historical comets apparently had similar orbital characteristics. He thought that it had to be the identical celestial body that returned approximately every 76 years. Halley predicted the reappearance of this comet in 1759, and his prediction proved correct. Since then, this celestial body has been known as Halley's Comet or Comet Halley. Subsequent to this, historical records of the appearance of Halley's Comet dating back to the year 240 BCE were found. However, astronomers before Halley did not know the identity of this celestial body and its period.

Even today, the orbits of very few comets are known and can be predicted far ahead. Only one of them, namely Comet Halley, is usually visible to the naked eye. All other comets come from very far away, from the edge of the solar system. They are relatively small celestial bodies consisting of frozen gas and ice that, because of their great distance, remain invisible unless they penetrate the inner solar system and develop a tail due to the warm rays of the Sun. Even today's large telescopes often only permit the sighting of these celestial bodies a few weeks or months before they become visible to the

²¹³ Origen, Contra Celsum, I,58.

naked eye. However, at the time of Jesus there were no telescopes. Comets simply suddenly appeared. Therefore, it was inconceivable in those days to predict when comets would appear. That is why the magi could not have known ahead of time when a comet would become visible, and it would have been impossible for them to arrive in Jerusalem precisely at the time a comet would appear, as the story of the Star of the Messiah describes.

Does a comet accord with the description of Matthew? Could it rise heliacally, be retrograde at the same time, and become stationary soon after? All this is possible, in principle. Colin Humphreys also asserts that the manner of speaking chosen by Matthew, namely the star's "standing over the birth place", clearly hints at a comet.²¹⁴ For comparison, he refers to the following passage in Dio Cassius:

Τό τε άστρον ὁ κομήτης ἀνομασμένος ἐπὶ πολλὰς ἡμέρας ὑπὲρ αὐτοῦ τοῦ ἄστεως αἰωρηθεὶς ἐς λαμπάδας διελύθη.

And the star, the so-called comet, having hovered (*aiōrētheis*) over the city [of Rome] for many days, dissolved into torches.

(Dio Cassius, Historia Romana, 54,29,8).

Another passage allegedly supporting his theory he finds in Josephus Flavius:

... ὑπὲρ τὴν πόλιν ἄστρον ἔστη ῥομφαία παραπλήσιον καὶ παρατείνας ἐπ' ἐνιαυτὸν κομήτης ...

... a star placed itself (*estē*) above the city, similar to a sword, and a comet that lasted for a [whole] year ... (Josephus Flavius, *De bello Judaico*, VI.5.3(289))

On the other hand, the wording in Matthew 2:9 is as follows:

ό ἀστὴρ ὃν εἶδον ἐν τῇ ἀνατολῇ προῆγεν αὐτούς, ἕως ἐλθὼν ἐστάθη ἐπάνω οὖ ἦν τὸ παιδίον.

The star which had been seen in the east in its rising went before them until it came and stood over [the place] where the child was.

In Ferrari's opinion, Humphreys' assertion that Matthew can only be referring to a comet is not supported at all when the Greek originals of Dio Cassius and Josephus are considered.²¹⁵ However, although the wording is quite different in all three passages, they still agree in that a celestial body stands above a place. Therefore, in fact, there *is* a parallel. Furthermore, this author has not found any texts where it is explicitly a planet that stands above a city. However, when there is only such a small number of references, how can there be any certainty that only a comet could be "standing" above a city? Moreover, Matthew's star is not standing above a city, but over the place in Bethlehem where Jesus was born.

However that may be, the question remains interesting whether or not comets appeared in the sky around the time of Jesus' birth. Neither Greek nor Roman

²¹⁴ Humphreys, "The Star of Bethlehem".

²¹⁵ "nicht die geringste Stütze findet"; Ferrari d'Occhieppo, *Der Stern von Bethlehem* (1994), pp. 172f.

nor cuneiform sources, as far as extant, report such phenomena. Since there are quite a number of reports of comets that appeared in the 1st century BCE and the 1st century CE, it is quite certain that *no eye-catching comet* appeared in the sky during the years when Jesus must have been born. Comet Halley appeared in 12 BCE, thus a couple of years too early. In addition, it was not very bright and eye-catching in that year.²¹⁶ Nevertheless, Arthur Stentzel (1923) as well as Kokkinos and Vardaman (1989) have tried to date the birth of Jesus to 12 BCE, thus into the year of Halley's appearance.²¹⁷ Stentzel and Kokkinos base their view on statements made in the Gospel of John, according to which Jesus may have been as old as 46 years when he was crucified (John 2:20), or "not yet 50 years old" (John 8:57). Church Father Irenaeus also stated this, referring to a tradition that allegedly went back directly to the apostles.²¹⁸ If that were correct, which, however, is uncertain, and if the crucifixion had taken place in the year 36 CE, as assumed by Kokkinos, then 12 BCE would be a plausible birth year of Jesus. Moreover, Vardaman points out that the Roman-Jewish historian Josephus Flavius mentions Jesus in the context of events that fell into the years 15-19 CE. Consequently, he draws the conclusion that Jesus must have been crucified several years earlier than is generally assumed. However, Josephus' testimony probably is not authentic. Unfortunately, the whole matter is, again, very complicated, and it is difficult to construct an argument from these statements. It must be stated, however, that these are maverick theories, and most scholars believe that Jesus was born later and died at a younger age.

Even if such an early birth year for Jesus were accepted, Halley's comet would not accord well with Matthew's description. The comet was first discovered by Chinese astronomers on 25 August 12 BCE near the star β *Geminorum*, which is near the ecliptic at an elongation of 83°. There cannot be talk of a heliacal rising of the star, such as Matthew seems to have had in mind. The comet did not appear in the eastern morning sky, but rose already at midnight. After its first observation, it moved toward the Sun very fast and made *its last rising* in the eastern morning sky only 16 days later on 10 September. On 9 September, it had already been visible in the western evening sky. It did not make any station during this short period of time.²¹⁹

²¹⁶ Kidger, *The Star of Bethlehem*, p. 240: "the comet was never particularly bright and barely passed magnitude +1."

²¹⁷ Arthur Stentzel, *Jesus Christus und sein Stern*, pp. 65ff.; Nikos Kokkinos, "Crucifixion in A.D. 36: The Keystone for Dating the Birth of Jesus", in: Vardaman/ Yamauchi (ed.), *Chronos, Kairos, Christos*, pp. 133-163; Jerry Vardaman, *Jesus' Life: A New Chronology*, op. cit., pp. 55-82.

²¹⁸ Irenaeus, Adversus haereses II,22,5, PL7/1, col. 784f., quoted above on pp. 20f.

²¹⁹ Calculations by this author using the Swiss Ephemeris, with the orbital elements of the comet given by Yeomans and Kiang for the perihelion passage in 12 BCE.

Humphreys favours a comet that is mentioned in a Chinese source and appeared between 9 March and 6 April 5 BCE near the star Altair in the constellation Aquila.²²⁰ The text is found in the astronomical reports in the "Book of the Han Dynasty" (*Hàn Shū*, 漢書).²²¹ It reads as follows:

<漢哀帝建平>二年二月,彗星出牽牛七十餘日。

[Han Emperor Ai, reign *Jiànping*], 2nd year, 2nd month, a comet (*huìxīng*, 彗星) emerges from (出) [the lunar lodge] Ox-Leader (*qiānniú*, 牽牛), for more than 70 days.²²²

The 2nd lunar month of the year mentioned corresponds to the period from 10 March to 7 April 5 BCE. *Qiānniú* (牽牛), the "Ox-Leader", was originally the star Altair, but was redefined in the second half of the 1st millennium BCE as a lunar lodge that included the stars α and β Capricorni.

Another mention of the same comet is found in the "Annals of the Earlier Han Dynasty" (*Qián Hàn Jì*, 前漢紀), a somewhat younger work:

二年春正月。有星孛于牽牛。七十餘日。

2nd year, spring, 1st month. There is a comet (*xīngbei*, 星孛) in [the lunar lodge] Ox-Leader. More than 70 days.²²³

The information given in this text differs from the other in that it dates the event in the 1^{st} month instead of the 2^{nd} . Perhaps this indicates that the comet was even visible in the previous month, if atmospheric conditions were very good.

The British astronomers Clark, Parkinson, and Stephenson, who believe that this star was the Star of Bethlehem²²⁴, do not interpret it as a comet, but as a nova. They point out that according to the sources, the star did not move but was fixed, and the duration of its visibility was unusually long. While the Chinese word used for the star is *huìxīng* (彗星), i.e. "broom star", thus actually should refer to a comet with a coma, they argue that the sources do

²²⁰ Humphreys, "The Star of Bethlehem".

²²¹ The work was completed in 111 CE and covers the period from 206 BCE to 25 CE.

²²² Hàn shū (漢書, 志, 天文志, 156), http://ctext.org/han-shu/tian-wen-zhi . Other authors usually quote this text from: Ho, "Ancient and medieval observations of comets and novae in Chinese sources". For Chinese terms, the present work uses the Pinyin transcription, which is now the official standard in China and Taiwan, whereas Ho uses an older transcription method. *Hui hsing* is here rendered as *huì xīng*, *p'o hsing* as *beì xīng* (*bó xīng*), and *ch'ien niu* as *qiān niú*.

²²³ *Qián Hàn Jì* (前漢紀, 孝哀皇帝紀上, 4), http://ctext.org/qian-han-ji/xiao-ai-huang-di-ji-shang). This work was written at approximately 200 CE and covers roughly the same period as the *Hàn Shū*.

²²⁴ Clark, Parkinson, Stephenson, "An astronomical re-appraisal of the Star of Bethlehem – a nova in 5 B.C."; Kidger, *The Star of Bethlehem*.

not always strictly distinguish comets (*huìxīng*/彗星, "broom star" or *beìxīng*/ bóxīng/孛星, "luxuriating star") from novae (*kèxīng*/客星, "guest star").²²⁵

Now, the $Han Sh\bar{u}$ provides a commentary on this phenomenon, which is usually ignored by publications that link this text to the Star of Bethlehem. Immediately after the above-cited text, the following explanation is given:

傳曰: 「彗所以除舊布新也。牽牛, 日、月、五星所從起, 曆 數之元, 三正之始。彗而出之, 改更之象也。其出久者, 為其 事大也。」

Tradition says: "The utility of the broom (*hui*, \ddagger) is the removal of the old [and] the establishment of the new. The Ox-Leader, from which the Sun, the Moon, and the five planets rise, [is] the starting point of calendrical calculations, the initial point of the three calendars. [The fact] that a *broom* [*star*] emerges from it is a picture of improvement. If its emergence lasts for long, this means that its concern is important (lit. great)."²²⁶

Although this text is only an astrological commentary and does not provide any additional astronomical information, some interesting conclusions can be drawn from it:

- 1. Since the text expressly refers to the picture of a "broom" and the "removal of the old", it must be concluded that a "broom", thus a comet's tail, was actually given.
- 2. The argument that the object was in the sky for a period that is rather long for a comet, may also be discounted. The text explicitly mentions the "long duration", and it is not impossible that a comet is visible for 70 days.
- 3. The text states that the comet emerges from the lunar lodge Ox-Leader (彗星出牽牛). This does not necessarily mean that the star stayed there and did not move. It cannot be concluded that the object was immovable.
- 4. The older identification of *qiānniú* with the star Altair might be shining through here: *Qiānniú* is referred to as the reference point of the beginning of the year. In the first half of the 1st millennium BCE and for observers in Xī'ān (Cháng'ān), the cultural and political centre of the *Zhou* dynasty, Altair made its heliacal rising near the winter solstice. The winter solstice was, and still is, the reference point of the Chinese lunar calendar, because the year begins on the second new moon after

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²²⁵ Kidger, *The Star of Bethlehem*, pp. 239-246. Cf. http://www.astrosurf. com/comets/Star_of_Bethlehem/English/Chinese.htm .

²²⁶ Vide $Han Sh\bar{u}$, op. cit. (I thank the sinologist Rafael Suter of the University of Zürich for reviewing my translation.) The parallel text in *Qián Hàn Jì* has a similar wording:

本志以為牽牛日月五星所從起。曆數之元也。彗孛加之。改更之象。

[&]quot;The original report states: 'The Ox-Leader, from which the Sun, the Moon, and the five planets rise, is the origin of the calendrical calculations. If a broom star joins it, this is a symbol of improvement."

the winter solstice. The "three calendars" (*sān zhēng*, $\equiv \mathbb{E}$, lit. "three first months") are three lunar calendars that were used under different dynasties and all were defined using the winter solstice.²²⁷

From points 1 to 3, it must be concluded that the star that appeared in the lunar lodge Ox-Leader (in Capricorn) must have been a comet, not a nova.

However, no matter whether the "broom star" was a comet or a nova, it does not fit Matthew's description: If the object appeared in Ox-Leader on 10 March, then it had an elongation of at least 70° . Consequently, there can be no talk of the star's rising in the east or its being observed at its heliacal rising, as required by Matthew. Even if the other text is followed which reports the observation in the preceding month, it still does not fit.²²⁸

Korean and Chinese reports also mention another comet (*xīngbeì*, 星孛) in the subsequent year, on 24 April 4 BCE, again in the same region of the sky, in the constellation *hégŭ* (河鼓), which comprised Altair and parts of the constellation Aquila. However, its elongation (angular distance from the Sun) was even greater than that of the comet of the previous year. Thus, here again, there can be no talk of the star's "appearance in the east".²²⁹

Thus, there are no historical testimonies of a comet that could have appeared around the time of the birth of Jesus and satisfied Matthew's criteria. Colin

²²⁸ More criticism concerning Humphrey's comet, based on celestial mechanics, is found in Ferrari d'Occhieppo, *Der Stern von Bethlehem* (1994), pp. 175-179.

²²⁹ Clark, Parkinson und Stephenson believe that this comet (in their opinion a nova) was actually the same as the one of the year 5 BCE. They draw this conclusion because (1) both stars appeared in the same region of the sky, (2) the Korean source mentions an invalid calendar date, and (3) Chinese sources allegedly do not mention a comet in the year 4 BCE. However, in reality, this comet is also mentioned in Chinese sources, in the *Hàn Shū* as well as the *Qián Hàn Jî*. In both texts, it reads as follows: 三年。。。三月己酉。。。有星孛于河鼓。"3rd year,... 3rd month, [day] *jǐyoǔ*, ... there is a comet in [the constellation] *hégǔ*." (*Hán Shū* (漢書), 紀, 哀帝紀, 156, http://ctext.org/han-shu/ai-di-j); *Qián Hàn Jî* (前漢紀), 孝哀皇帝紀上, 9, http://ctext.org/qian-han-ji/xiao-ai-huang-di-ji-shang). The difference from the Korean observation is that it mentions the 3rd instead of the 2nd month. Since the day *jǐyoǔ* is valid for this month, only one of the three arguments of Parker and colleagues remains, namely the fact that within two years two comets appeared in the same region of the sky. However, although this may be unusual it is not impossible. (Vide also Cullen, "Can we Find the Star of Bethlehem in Far Eastern Records?")

²²⁷ The three lunar calendars, *Xià Lì* (夏历/夏正), *Yīn Lì* (殷历/殷正), and *Zhoū Lì* (周历/周正), are named after the dynasties under which they were used. All three determined the beginning of the year based on the phase of the Moon on the winter solstice (which approximately coincided with the heliacal rising of Altair). However, *Xià Lì* started the year on the second new moon after the winter solstice, *Yīn Lì* on the first such new moon, and *Zhoū Lì* on the last new moon before the winter solstice. Since the time of Emperor Wu of Han (156-87 BCE) only *Xià Lì* has been used.

R. Nicholl objects that in western as well as eastern sources some great comets are missing. For this reason, one should not stipulate that the "Great Christ Comet" would have to be attested in historical sources.²³⁰ He may be right in that. However, then it would be desirable for Matthew to have given at least an unequivocal clue to a comet. Unfortunately, there is no such clue; there is nothing but a "star".

In Nicholl's opinion, the extraordinary brightness of the "star" is such a clue, because only comets, novae, or supernovae could be really bright and spectacular. However, the idea that the object was extremely bright is only found in the apocryphal Gospel of James, and even there not the slightest clue to a comet's tail is found. In Matthew's description, by contrast, the star seems to have been so inconspicuous that Herod had to inquire for more information about it. Nicholl falls prey to the old thinking error that only a spectacular and eye-catching celestial occurrence could have indicated the messiah. However, astrology is not interested in spectacular, but in *meaning-ful* occurrences.

Another clue to a comet allegedly lies in the fact that Matthew implicitly alludes to the "star out of Jacob" and the "sceptre out of Israel (Numbers 24:17). Nicholl identifies the "star" with the "sceptre" and asserts that "sceptre" ($\bar{s}e\bar{b}et$, $\psi_{\mp}\psi$) here is a term for a comet with a very long and straight tail. He believes that this interpretation of the "sceptre" is supported by the *Babylonian Talmud*, *Tractate Berakhot* 58b, where a similar expression in Aramaic language is used to denote a comet ($\psi_{\mp}c\psi_{-})$).²³¹ However, firstly, the Talmud is late, and secondly, the same word for "sceptre", namely $\bar{s}e\bar{b}et$, also appears in Genesis 49:9f., where it refers to an object *between the legs or feet of the constellation of Leo*. There, the "sceptre" hardly refers to a comet, but either to Regulus or (in this author's opinion) rather to the whole configuration of the stars in the head of Leo.²³² Nicholl's interpretation of the star as a comet is not compulsory.

In Nicholl's opinion, a reference to the comet, thus to the Star of Bethlehem, is also made in Revelation 12. In his visions, John sees a woman rising in the sky who is clothed by the Sun and has the Moon under her feet. She gives birth to a son

δς μέλλει ποιμαίνειν πάντα τὰ ἔθνη ἐν ῥάβδῷ σιδηρῷ

destined to shepherd all the nations with a rod of iron.

Nicholl interprets this "rod" as a heliacally rising comet in the constellation of Virgo. This passage shall be discussed later in detail. The "rod of iron" ($\dot{\rho}\dot{\alpha}\beta\delta\sigma\varsigma$ $\sigma_i\delta\eta\rho\dot{\alpha}$) makes reference to Psalm 2:9, where, again, the Hebrew

²³⁰ Nicholl, *The Great Christ Comet*, pp. 147f. and 293ff.

²³¹ Nicholl, *The Great Christ Comet*, p. 135.

²³² Vide this author's explanations on pp. 355ff.

word *šēbet* is used. However, the same verse is also referred to in Revelation 2:27-28, and here the "rod of iron" is linked to the "morning star" (\dot{o} ἀστήρ \dot{o} πρωινός). Is it plausible that the "morning star" is a comet? Nicholl does not provide any testimonies that the term was ever used for an object other than *Venus*. Even in 2 Peter 1:19, he believes that the "morning star" is the comet, although the Greek Bible uses the word *phōsphoros* and the Vulgate the Latin word *lucifer*, both of which can actually only refer to *Venus*.

Furthermore, Nicholl argues that only a comet by means of its tail could have served as a "pointer" and shown the birth place to the magi, of course if they had been standing in the right place at the right time.²³³ However, this is not a convicing argument either. Matthew does not even say that the star "pointed to" the place, but only that it "came and stood" over it. On the morning of 1 September 2015, this author walked on the street from Jerusalem to the Nativity Church in Bethlehem, while the morning star was rising on his left hand side. When he arrived at the Nativity Church and went to the car park in front of it in order to take a picture, he suddenly and unexpectedly saw Venus stand above the church. To him, this was sufficient as a celestial omen. He did not need the arrow of a comet (photos on p. 296).

Nicholl's other arguments in support of a comet are mostly based on uncertain assumptions, in this author's opinion. Nicholl believes that the magi saw the star in Babylon at its heliacal rising. After that, they allegedly set out on their journey to Jerusalem. At the same time, the star disappeared from the eastern morning sky and reappeared in the western evening sky. When the magi arrived in Jerusalem after about 30 days and from there journeyed south towards Bethlehem, the star suddenly "went ahead of them", and thus was also visible in the southern sky.²³⁴ Nicholl is certainly right in stating that only a comet with suitable orbital parameters could have been capable of such complex and fast motions.²³⁵ However, the problem is that this interpretation of the events does not necessarily follow from Matthew 2 and there is no generally accepted consensus about them. Proponents of other theories about the Star of Bethlehem have given different interpretations of the same text. E.g., Nicholl's description of the events is contradicted by the conclusions drawn by this author further above. To sum up, it can be stated that Nicholl's work testifies to great astronomical competence, however, in the final analysis, his theory of the "Great Christ Comet" is based on rather thin evidence and not better founded than other theories.

More objections can be made to the interpretation of the Star of Bethlehem as a comet. Comets were considered harbingers of disaster. Ptolemy writes:

²³³ Nicholl, p. 137ff.

²³⁴ Nicholl, p. 66ff.

²³⁵ Nicholl, p. 134.

Τηρητέον δὲ ἔτι καὶ τὰς συνισταμένας ἤτοι κατὰ τοὺς ἐκλειπτικοὺς καιροὺς ἢ καὶ ὀτεδήποτε κομητῶν ἐπιφανείας πρὸς τὰς καθ' ὅλου περιστάσεις, οἶον τῶν καλουμένων δοκίδων ἢ πίθων καὶ τῶν τοιούτων, ὡς ἀποτελεσματικὰς μὲν φύσει τῶν ἐπὶ τοῦ Ἄρεως καὶ τῶν τοῦ Ἐρμοῦ ἰδιωμάτων καὶ πολέμων καὶ καυσώδων ἢ κινητικῶν καταστημάτων καὶ τῶν τούτοις ἐπισυμβαινόντων, δηλούσας δὲ διὰ μὲν τῶν τοῦ ζωδιακοῦ μερῶν, καθ' ὧν ἂν οἱ συστάσεις αὐτῶν φαίνονται, καὶ τῶν κατὰ τὰ σχήματα τῆς κόμης προσνεύσεων τοὺς τόπους οἶς ἐπισκήπτουσι τὰ συμπτώματα.

The appearances of comets should be observed, too, whether they [appear] during the times of eclipse or at any time [with the effect] of general distress, such as, e.g., [the appearances] of so-called "bars" or "trumpets" or "jars" and such like, because on the one hand, they by nature cause the peculiarities that [occur] under Mars or those of Mercury as well as wars and heatwaves or states of motion and [things] that accompany them; and on the other hand because, through the places in the zodiac where their cores appear and [through the directions] they point to by means of the shape of the coma, they indicate the places on which they cast their [inauspicious] concomitants ($\sigma \nu \mu \pi \tau \dot{\omega} \mu \alpha \pi$).²³⁶

Furthermore, comets were not linked with the birth of a king, but, to the contrary, with the downfall and death of a ruler in power and accession of a new ruler. Suetonius writes in his biography of Nero:

Stella crinita, quae summis potestatibus exitium portendere vulgo putatur, per continuas noctes oriri coeperat. Anxius ea re, ut ex Balbillo astrologo didicit, solere reges talia ostenta caede aliqua illustri expiare atque a semet in capita procerum depellere, nobilissimo cuique exitium destinavit...

A hairy star, which, as is generally believed, indicates their end to greatest powers, had begun to rise over several subsequent nights. Terrified by this, he decreed death for every noble man, as he had learnt from the astrologer Balbillus, that kings use to appease such omina through the death of some excellent men and divert them from themselves onto the heads of nobles... (Suetonius, *Nero* 36)

That would at least explain Herod's fear of the new-born "king".

A special case is the comet that appeared in July 44 BCE, four months after the murder of Julius Caesar, which was extremely bright and impressive. People in Rome believed, following Augustus' propaganda, that the comet had come in order to carry the soul of Caesar to the celestial gods.²³⁷ However, in Vergil's opinion, the comets that appeared after the death of Caesar (as well as other omina) were linked with the gory struggles for the succession of Caesar.²³⁸ Pliny the Elder also was of this opinion:

²³⁶ Ptolemy, *Tetrabiblos* II.9.

²³⁷ Ovid, *Metamorphoses* XV,745-842.

²³⁸ Vergil, Georgica I,487ff.

Sed cometes numquam in occasura parte caeli est, terrificum magna ex parte sidus atque non leviter piatum, ut civili motu Octavio consule iterumque Pompei et Caesaris bello, in nostro vero aevo circa veneficium, quo Claudius Caesar imperium reliquit Domitio Neroni, ac deinde principatu eius adsiduum prope ac saevum.

However, a comet is never in the falling part of the sky^{239} . It is a mostly terrifying star and is not easily appeased, as e.g. in the civil war when Octavius was consul; and again in the war of Pompeius and Caesar; in our time around the time of the poisoning, because of which Emperor Claudius bequeathed the empire to Domitio Nero; and after that, during the reign of the latter – a constant and rogue [star].²⁴⁰

As has been mentioned, Augustus considered Caesar's comet his own lucky star, because he had won the struggles for Caesar's succession. Nevertheless, Pliny states that Rome was the only place in the world where a comet was worshipped in a temple. Otherwise, comets were always considered harbingers of evil.²⁴¹

So, how did Origen arrive at the conclusion that the Star of Bethlehem must have been a comet? He writes:

Έπὶ μεγάλοις τετήρηται πράγμασι καὶ μεγίσταις μεταβολαῖς τῶν ἐπὶ γῆς ἀνατέλλειν τοὺς τοιούτους ἀστέρας, σημαίνοντας ἢ μεταστάσεις βασιλειῶν ἢ πολέμους ἢ ὅσα δύναται ἐν ἀνθρώποις συμβῆναι, σεῖσαι τὰ ἐπὶ γῆς δυνάμενα. ἀνέγνωμεν δ'ἐν τῷ περὶ κομητῶν Χαιρήμονος τοῦ Στοϊκοῦ συγγράμματι τίνα τρόπον ἔσθ'ὅτε καὶ ἐπὶ χρηστοῖς ἐσομένοις κομῆται ἀνέτειλαν, καὶ ἐκτίθεται τὴν περὶ τούτων ἱστορίαν. Εἴπερ οὐν ἐπὶ βασιλείαις καιναῖς ἢ ἄλλοις μεγάλοις συμπτώμασιν ἐπὶ γῆς ἀνατέλλει ὁ καλούμενος κομήτης ἤ τις τῶν παραπλησίων ἀστήρ, τί θαυμαστὸν ἐπὶ τῆ γενέσει τοῦ καινοτομεῖν μέλλοντος ἐν τῷ γένει τῶν ἀνθρώπων καὶ διδασκαλίαν ἐπεισάγειν οὐ μόνον Ιουδαίοις ἀλλὰ καὶ Ἔλλησι πολλοῖς δὲ καὶ τοῖς βαρβάρων ἔθνεσιν ἀστέρα ἀνατεταλκέναι.

When beggars die, there are no comets seen;

The heavens themselves blaze forth the death of princes.

Even today, comets are more likely to cause fear. An example of this is the end-times atmosphere and the mass suicide of the Heaven's Gate sect when the Hale-Bopp comet appeared in 1997. On the other hand, *modern astrologers* pay little attention to comets because they find them hard to read. It was, in fact, mainly the press that provoked fears by purposely printing prophecies of doom made by dubious people who were looking for publicity. For example, compare the newspaper articles of that time with the editions of the German astrology journals *Astrologie Heute* and *Meridian*.

²³⁹ The intended astronomical meaning of this sentence is unclear.

²⁴⁰ Plinius, Naturalis Historia 2,23,92ff. (2,33).

²⁴¹ The idea that comets indicated the overthrow of a ruler was to survive for a long time. It was "confirmed", as it were, in 1066, when Halley's Comet made an impressive spectacle, and the Normans conquered England. One can admire an illustration of that on the Bayeux Tapestry that depicts this important historical event. Shakespeare writes in *Julius Caesar* ii, 2, 1006f.:

It has been observed that at the time of great events and the greatest changes on the earth this kind of stars arises ($\dot{\alpha}\nu\alpha\tau\epsilon\lambda\lambda\epsilon\nu\nu$), which either indicate the overthrow of kingdoms or wars or all other [things] that can occur among humans and can rock the [things] that are on earth. However, in the book of the Stoic Chairemon *On Comets*, we have read how it is possible that comets sometimes also rose before the occurrence of auspicious [things]; and he provides historical reports about these. Now, if at the times of new kingdoms or other great occurrences on the earth, the so-called comet or a similar star rises, then does it surprise that a star rose at the time of the birth of the one who was to cause a re-creation in the race of human beings and was to introduce his teaching not only for the Jews but also for the Greeks and many other barbarian peoples?²⁴²

Unfortunately, the writings of Chairemon of Alexandria are lost. Origenes points out that the appearance of a comet, although usually indicating disaster, could nevertheless indicate the birth of Christ because Jesus also caused a fundamental change in the history of the world. This view seems to be supported by the Roman historian Marcus Junianus Justinus, who reports that the great historical importance of Mithridates VI of Pontus was indicated by spectacular comets in the year of his birth and the year of his accession:

Huius futuram magnitudinem etiam caelesta ostenta praedixerant. Nam et eo quo genitus est anno et eo quo regnare coepit stella cometes per utrumque tempus LXX diebus ita luxit, ut caelum omne conflagrare videretur. Nam et magnitudine sui quartam partem caeli occupaverat et fulgore sui solis nitorem vicerat; et cum oreretur occumberetque, IIII horarum spatium consumebat.

His future greatness had already been predicted by celestial omens. For both in the year he was born and in the one he began to rule, a comet star shone for 70 days so brightly that the whole sky seemed to burn. For, with its greatness, it covered the fourth part of the sky and with its brightness, it even overcame the splendour of the Sun. And it took it the time of four hours to rise and to set.²⁴³

Here, a comet is apparently considered the birth star of a king. However, it must be noted that the "great importance" of Mithridates is, again, of military nature, so that Ptolemy's and Pliny's assessment of comets as harbingers of disaster actually remains valid. Astrologers, at least, would not have considered the comet an auspicious omen, let alone a hint at Jesus' message of peace and charity. Matthew's *magi* "rejoiced in great joy" when they saw the star above Bethlehem. The appearance of a comet would have been terrifying.

It could be argued that the Jews actually did expect a fundamental revolution in world history from the coming Messiah. However, Josephus Flavius reports that even Jewish scholars interpreted the comet that appeared before the first war as an sinister omen. He writes:

²⁴² Origenes, Contra Celsum, I,59.

²⁴³ Justinus, Trogi Pompei Historiarum Philippicarum Epitoma XXXVII,ii,1-3.

Τὸν γοῦν ἄθλιον δῆμον οἱ μὲν ἀπατεῶνες καὶ καταψευδόμενοι τοῦ θεοῦ τηνικαῦτα παρέπειθον, τοῖς δ' ἐναργέσι καὶ προσημαίνουσι τὴν μέλλουσαν ἐρημίαν τέρασιν οὕτε προσεῖχον οὕτ' ἐπίστευον, ἀλλ' ὡς ἐμβεβροντημένοι καὶ μήτε ὅμματα μήτε ψυχὴν ἔχοντες τῶν τοῦ θεοῦ κηρυγμάτων παρήκουσαν, τοῦτο μὲν ὅτε ὑπὲρ τὴν πόλιν ἄστρον ἔστη ῥομφαία παραπλήσιον καὶ παρατείνας ἐπ' ἐνιαυτὸν κομήτης, τοῦτο δ' ἡνικα πρὸ τῆς ἀποστάσεως καὶ τοῦ πρὸς τὸν πόλεμον κινήματος ἀθροιζομένου τοῦ λαοῦ πρὸς τὴν τῶν ἀζύμων ἑορτήν, ὀγδόη δ' ἦν Ξανθικοῦ μηνός, κατὰ νυκτὸς ἐνάτην ὥραν τοσοῦτο φῶς περιέλαμψε τὸν βωμὸν καὶ τὸν ναόν, ὡς δοκεῖν ἡμέραν εἶναι λαμπράν, καὶ τοῦτο παρέτεινεν ἐφ' ἡμίσειαν ὥραν· ὃ τοῖς μὲν ἀπείροις ἀγαθὸν ἐδόκει, τοῖς δὲ ἱερογραμματεῦσι πρὸς τὼν ἀποβεβηκότων εὐθέως ἐκρίθη.²⁴⁴

The deceivers and those who lied about God persuaded the miserable people, not attending nor giving credit to the omens that were so obvious and foretold their imminent desolation, but, as if they were deaf and had neither eyes nor soul, they did not regard the denunciations that God made to them; e.g. when a star that resembled a sword stepped over the city, and a comet, that continued [the whole] year; and when before the rebellion and the commotion [that lead] to the war, when the people assembled for the feast of the unleavened bread, on the 8th of the month Xanthicus (Nisan), in the ninth hour of the night, so great a light shone around the altar and the temple that it appeared to be bright day time, which lasted for half an hour. The unexperienced considered it a good [omen], however, the sacred scribes interpreted it as portending the events that occurred immediately after that.

Thus, according to Josephus, only naive people considered the comet an auspicious omen.

However, Matthew need not have been an expert in astrology and may not have known about the evil quality of cometary appearances. Jenkins thinks²⁴⁵ that Matthew, who must have written his gospel after 70 CE, was inspired by the appearance of comet Halley in the year 66 CE. In the same year, the Armenian king Tiridates travelled to Rome, in order to prostrate before Emperor Nero and to adore him as his god.²⁴⁶ Tiridates was a follower of the Mithras cult, and like the *magi*, he came from the east. Furthermore, he returned home on a different way than he had come, just like the magi in Matt 2. Jenkins believes that Matthew must have thought of similar occurrences taking place at the time Jesus was born. The astronomical facts seem to fit, as well. Tiridates' comet appeared at the beginning of the year in the eastern sky. In March, when it reached its greatest brightness (about 1 mag), it was visible all night long. Near the end of its visibility period, in April, when it lost brightness very fast, it was visible in the southern evening sky - thus in the direction Jerusalem-Bethlehem. According to Jenkins, it was even almost stationary in right ascension.

²⁴⁴ Josephus Flavius, *De bello Judaico*, VI.5.3(288ff.)).

²⁴⁵ Jenkins, "The Star of Bethlehem and the comet of AD 66".

²⁴⁶ Dio Cassius, *Historia Romana*, 63.1-7.

The description seems to accord well with that given by Matthew. It could also be added that at the end of March the comet passed south of Virgo during ten days. So, this constellation which seems symbolically relevant for the birth of Jesus was part of the celestial spectacle. Nevertheless, there are some strong points that are opposed to this solution:

- Comets are particularly impressive when they have a long tail. However, neither Matthew nor any other apocryphal or other early Christian text contains even the slightest clue about a comet's tail. At best, there is talk of the star's extraordinary brightness and that it outshone all other stars. Although some smaller comets do not have a distinct tail, only a "cloud of mist", it is important to note that the most eye-catching characteristic of a comet is missing in the source. Thus, a comet is not a likely candidate for the Star of Bethlehem.

- As will be shown later, the star of the Messiah goes back to an Old Testament tradition that required that Israelite prophets and kings have a special connection with some star. For this reason, the comet of 66 CE cannot have been the model of the "Star of the Messiah", although Matthew could perhaps have been inspired by it.

- If Matthew had believed that the Star of Bethlehem had appeared similar to Comet Halley in the year 66 CE, would he not have drawn the conclusion that in the same year another event of paramount spiritual importance had to have occurred? Would he not have expected the Second Coming of Christ? However, there is no clue that this was the case. It thus seems that he considered the comet of 66 CE irrelevant, and it must be concluded that he had thought of the Star of Bethlehem as a different phenomenon. Therefore, the comet theory does not solve the mystery of the Star of Bethlehem.

Novae and Supernovae

According to other theories, the Star of the Messiah was a nova or supernova, thus a "new star" appearing suddenly that had not been visible in the sky before. Strictly speaking, novae are not really stars coming into existence. Before their appearance, they may have been extremely faint or even invisible, but due to some physical circumstances, they produce a huge explosion and become so bright that they are suddenly visible to the human eye. Present-day astronomy differentiates between novae and supernovae. A *supernova* is an explosion of a high-mass star that has used up all its nuclear fuel and reached the end of its "life" duration. On the other hand, when the "corpse" of a low-mass star, a so-called "white dwarf" has sucked in a sufficient amount of gas from its environment, a nuclear explosion can occur, which is called a *nova*. For the search for the Star of Bethlehem, this distinction is rather irrelevant, because it has been discovered only in the 20th century. The *magi* would only have noticed a "new star", i.e. a *stella nova*, and would not have understood what kind of physical processes produced the phenomenon.

The most famous advocate of the theory that the Star of Bethlehem was a nova was Johannes Kepler. He was inspired by his observation of the great supernova of the year 1604. The phenomenon made a great stir amongst contemporary scientists. It was believed to indicate great historical events, perhaps even the Second Coming of Christ, and, consequently, great expectations and fears unsettled the public. Since the "new star" happened to appear in the vicinity of a Jupiter-Mars-Saturn conjunction, scholars were reminded of an ancient theory of Aristotle's that new stars or comets could be caused by the conjunction of three or more planets.²⁴⁷ Although Kepler was sceptical towards this theory, which in modern view is actually wrong, he worked out that a conjunction of Jupiter, Saturn and Mars also had occurred in 7 BCE. He speculated that by the will of God a nova could also have accompanied that conjunction and that it could have been the Star of the Messiah. He believed that Jesus was born two years after the conjunction and the appearance of the star.²⁴⁸

In recent times, new variations of Kepler's theory have been developed, where the Star of Bethlehem is also interpreted as a nova combined with the conjunction of Jupiter and Saturn in 7 BCE. Costantino Sigismondi believes that the Star of Bethlehem could have been the variable star *Mira*, which is located near the place where the Jupiter-Saturn conjunction occurred in 7 BCE.²⁴⁹ The distance of Mira from the conjunction was of about two hand

²⁴⁷ Abū Ma'shar, *Book of Religions and Dynasties*, 8.1.7; Aristotle, *Meteorology*,
I.6. According to Aristotle, this theory goes back to Democritus and Anaxagoras.

²⁴⁸ Kepler, Opera Omnia IV,177; 347.

²⁴⁹ Sigismondi, "Mira Ceti and the Star of Bethlehem" (2002).

palms (or fists) at arm's length.²⁵⁰ Mira is of variable brightness, with a period of approximately 332 days. During its minima, it is so faint that it can be seen only with a telescope, whereas during its maxima it can become a dominant star in its environment in the constellation Cetus. However, it is unknown whether Mira reached such an extreme peak brightness in the birth year of Jesus.

Frank J. Tipler is of the opinion that an extremely rare and bright hypernova could have taken place in 7 BCE in the Andromeda Galaxy and could have been observed from the earth, although it would not have been eye-catching.²⁵¹ Tipler chooses the Andromeda Galaxy because in Jesus' time and at the latitude of Bethlehem, it culminated in the zenith. In addition, its distance from 0° right ascension was almost the same as the distance in geographic longitude between Bethlehem and Babylon. Furthermore, Tipler points out that in Greek mythology, Andromeda was the daughter of Cepheus, the king of Phoenicia, and for this reason, he believes that the celestial omen pointed to Palestine. Although there is no historical testimony of a hypernova in the Andromeda Galaxy, Tipler hopes that its traces could be identified through astronomical observation. He believes that Jesus was either born on the spring equinox, on 22 March 8 BCE, when the hypernova in Andromeda made its heliacal rising, or else on the autumnal equinox, on 21 September 7 BCE²⁵², near the acronychal rising of Jupiter and Saturn. In both cases, the star would have been in a position where Babylonian sky gazers could have observed it.

Furthermore, Kepler was not the first one who believed that the Star of Bethlehem was a "nova". In fact, already before Kepler it was generally assumed that the star had to have been a nova or a comet, e.g. the Italian humanists Marsilio Ficino (15th cent.) and Gerolamo Cardano (16th cent.).²⁵³ As has been stated, the difference between comets and novae was not understood yet. Even in Kepler's time, novae were still considered to be "comets without a tail", and Kepler may have been the first one to state that the "new star" of 1604, unlike than comets, did *not move* relative to the fixed stars. From this, he concluded that novae belonged to the sphere of the fixed stars, whereas comets, because of their motion, had to be reckoned among the planets and had to be resident in lower celestial spheres.

 $^{^{250}}$ On 29 May, the date of the first of the three conjunctions, the distance from Jupiter was 19.3°, at the time of the first station in mid-July 16.9°.

²⁵¹ Tipler, "The Star of Bethlehem" (2005).

²⁵² Tipler gives the year "6 B. C.". However, he seems to mix up astronomical and historical year numbering.

²⁵³ Ficino, *Opera*, vol. I, pp. 478ff. ("De stella magorum"); Cardanus, *Opera omnia*, vol. V, p. 221 ("Servatoris genesis" in his commentary on the Tetrabiblos of Ptolemy).

The idea that the Star of Bethlehem was a nova is even found in ancient writers. As has been mentioned already, Origen believed that the star was a comet. However, Ignatius of Antioch (2^{nd} cent.) compares it to a nova. In his letter to the Ephesians, chap. 19, he writes:

Άστὴρ ἐν οὐρανῷ ἕλαμψεν ὑπὲρ πάντας τοὺς ἀστέρας, καὶ τὸ φῶς αὐτοῦ ἀνεκλάλητον ἦν, καὶ ξενισμὸν παρεῖχεν ἡ καινότης αὐτοῦ. Τὰ δὲ λοιπὰ ἄστρα, ἅμα ἡλίῳ καὶ σελήνῃ, χορὸς ἐγένετο τῷ ἀστέρι, αὐτὸς δὲ ἦν ὑπερβάλλων τὸ φῶς ὑπὲρ πάντα. Ταραχή τε ἦν, πόθεν ἡ καινότης ἡ ἀνόμοιος αὐτοῖς.

A star shone forth in the sky, more than all stars, and its light was indescribable and its newness caused amazement. And the other stars, together with the Sun and the Moon, became a roundel for the star, whereas it itself exceeded in light above all [of them]. And there was confusion about where the newness [had come] from, which [was] unlike them.

The fact that the "star" allegedly was of extraordinary brightness points to a very bright nova or supernova. This description obviously is not in agreement with the phenomenon described by Matthew, which seems to have been rather inconspicuous. It is possible that Ignatius was influenced by his observation of some supernova. Which one, however, is difficult to determine, especially as the life dates of Ignatius are not precisely known. It is also possible that he had learnt about such an appearance from other authors. E.g. the description given by the apocryphal Gospel of James could have influenced Ignatius:

εἴδομεν ἀστέρα παμμεγέθη λάμψαντα ἐν τοῖς ἄστροις τούτοις καὶ ἀμβλύνοντα αὐτούς τοῦ μὴ φαίνειν.

We have seen that a very large star shone among these other stars causing them to appear so pale that they did not shine anymore. ... (apocryphal Gospel of James 21:2)

Furthermore, Ignatius could have thought of the "comet" that, according to the Roman Historian Marcus Junianus Justinus, appeared in 164 BCE at the birth of Mithridates VI and allegedly even overcame the Sun with its light (vide citation above on p. 124). However, other than Justinus' description, the text of Ignatius does not contain any evidence for a comet's tail.

In addition, it must also be mentioned that the oldest depictions of the Star of Bethlehem, which stem from the 2nd century, always show the star without a comet's tail.²⁵⁴ It seems that in the opinion of ancient authors, a nova or supernova was a more likely candidate for the Star of Bethlehem than a comet.

As has been stated already, modern authors who plea for a nova or supernova have referred to the "comets" mentioned in Chinese sources of the years 5 and 4 BCE, which they interpret as reports of *novae*. Chinese sources were first considered by the Jesuit China missionary Jean-François Foucquet

²⁵⁴ Crudele, "Bethlehem, Star of", http://www.disf.org/en/voci/35.asp.

who, in the year 1729, published a Latin translation of a Chinese timetable of Chinese history. In the year 5 BCE, he adds the following remark:

stella nova in coelo 70 et amplius dies. A new star in the sky, 70 and more days.²⁵⁵

This remark obviously makes reference to Kepler's *stella nova* as well as the Chinese observation discussed further above. At least, Hans Sloane in his article published in 1730 concerning Foucquet's publication, believed that this "new star" could have been the Star of Bethlehem.²⁵⁶ Later, this idea was taken up by Friedrich Münter (1827)²⁵⁷ and Karl Wieseler (1843)²⁵⁸ and still has its followers today, as has been seen.²⁵⁹ However, already in the year 1777, the Jesuit de Mailla had published a comprehensive Chinese history work in French translation, where the alleged novae of 5 and 4 BCE are mentioned and correctly designated as "comets".²⁶⁰ As has been shown, it would be *against* the Chinese wording to interpret these phenomena as *novae*. In addition, all hitherto attempts to identify these "novae", i.e. to find variable stars that would have been able to produce the phenomena, have been unconvincing.²⁶¹

Furthermore, it has been found that these objects, which appeared in March and April near the star Altair, could not have appeared in the east during this time of the year as required by Matthew's report. For this reason, they are not good candidates for the Star of Bethlehem. In addition, novae and supernovae do not fit Matthew because, as has been shown, the Star of Bethlehem seems to have made motions and stations. In this respect, a planet or comet is a lot more convincing than a fixed star.

Finally yet importantly, it has to be mentioned again that the magi must have calculated the phenomenon beforehand. However, comets and novae could

²⁵⁵ Foucquet, *Tabula chronologica historiae Sinicae connexa*. The Chinese original is titled *Gāng Jiàn Jiǎ Zǐ Tú* (鋼鑑甲子圖) and provides information about the Chinese emperors between 424 BCE and 1705 CE.

²⁵⁶ Sloane, "An Explanation of the new Chronological Table of the Chinese History, translated into Latin from the Original Chinese, by Father Johannes Franciscus Foucquet", pp. 422f.

²⁵⁷ Münter, Der Stern der Weisen, p. 29.

²⁵⁸ Wieseler, Chronologische Synopse der vier Evangelien, pp. 69-73.

²⁵⁹ Vide this author's explanations in the previous chapter.

²⁶⁰ Mailla, *Histoire de la Chine*, vol. 3, p. 214. It is a translation of the text *Tōng Jiàn Gāng Mù* (通鑑綱目) from the 12th century.

²⁶¹ Vide Kidger, *The Star of Bethlehem*, pp. 267ff. Novae are stars with periodic outbursts of brightness, whereas supernovae are star explosions. A supernova in the time of Jesus could be identified, in principle, based on its still expanding cloud of debris. Unfortunately, no remains of such an event have been found.

not be predicted in ancient times. Therefore, these two categories of celestial bodies are not suitable candidates for the Star of Bethlehem.

For all these reasons, Werner Papke's theory can not be considered either. Papke interprets the Star of the Messiah in connection with the Woman of the Apocalypse in Revelation 12, who is clothed with the Sun, has the Moon under her feet and who is giving birth to a boy. He identifies this figure, which has been the model for countless depictions of Mary, with a Babylonian constellation of the name of *Erua*, which was located between Leo and Virgo and had its head in the constellation of the Hunting Dogs (*Canes venatici*). Papke believes that the Star of the Messiah was a supernova in the lap of Erua, in the constellation of the Hair of Berenice (*Coma Berenices*).

Apart from the facts mentioned that refute the idea of supernovae, it must be objected that in the celestial area mentioned by Papke, no traces of a past supernova have been found. Papke responded to this objection in an article published in the Internet.²⁶² There he refers to intergalactic dust clouds in the large galaxy cluster of *Coma Berenices* that were discovered by Finnish and German scientists in 1997.²⁶³ Papke believes that these dust clouds could interfere with the discovery of remains of the supernova. This would mean, however, that Papke's supernova would not have occurred in our galaxy but in the Coma Galaxy Cluster. Still, such a *faraway* supernova would not have been visible to the naked eye from the earth. A supernova can reach nearly the brightness of a galaxy but even the brightest galaxies in the Coma Cluster are only observable through an amateur telescope. Even an extremely rare and bright hypernova that would have occurred in the remote Coma cluster would not have been observable by the naked eye.

²⁶² Papke, "Das Zeichen des Messias", http://kahal.de/017-WP-ZDM.pdf .

²⁶³ http://www.esa.int/esaCP/Pr_37_1997_i_EN.html .

The Triple Jupiter-Saturn Conjunction in Pisces (Modern Theories)

Next to be evaluated is the theory which which for a long time and even up to the present day has the most followers. It can be traced back to the considerations of Kepler concerning the supernova of 1604/1605, but now ignores comets and novae. While Kepler believed that the Star of Bethlehem was a nova that appeared in the vicinity of a conjunction of Saturn, Jupiter, and Mars, later authors arrived at the conclusion that the Star of Bethlehem had to have been a triple conjunction of Saturn and Jupiter in Pisces in the year 7 BCE. The dates of the exact conjunctions were 29 May, 1 October, and 5 December 7 BCE. However, the two planets stood close to each other during their whole visibility period between April 7 BCE and February 6 BCE. Also, the followers of this theory do not necessarily assume that Jesus must have been born exactly on one of the above-mentioned dates. Ferrari, and after him Hughes and Seymour, believed that the "rising in the east" that the magi referred to and believed to be a sign of the birth of the Messiah took place on 15 September. On this day, the two planets rose just after sunset in a close conjunction above the eastern horizon, i.e. they synchronously made their so-called acronychal rising.²⁶⁴ However, Ferrari suggests that Jesus was actually already born on 17 January 7 BCE. He believes that this date follows from the information given by Clement of Alexandria.²⁶⁵ On this date, the two planets were still separated from each other by 14°, which could hardly be called a "conjunction".

Now, the supporters of the Jupiter-Saturn-Pisces theory are of the opinion that this celestial configuration, astrologically, accords particularly well with the birth of a "King of the Jews". The planet that we call Jupiter became mythologically linked to the kingship of the gods in many ancient cultures, for example Marduk in Babylonia, Zeus in Greece, and of course Jupiter among the Romans. Saturn was considered to be the planet of the Jews. The Bible itself confirms this in Amos 5:26, referring to an ancient Pales-tinian cult of Kaiwan-Saturn.²⁶⁶

How would Babylonian *magi* have commented on this theory? Ferrari mentions a cuneiform text from Borsippa near Babylon that allegedly supports the assignment of Saturn to Israel. Unfortunately, he does not give an exact reference.²⁶⁷ This author has only found a cuneiform text where there is talk

²⁶⁴ Hughes, *The Star of Bethlehem*, p. 193; Seymour, *The Birth of Christ*, pp. 125-131.

²⁶⁵ Ferrari d'Occhieppo, Der Stern von Bethlehem, pp. 85-91.

²⁶⁶ Vide this author's explanations on pp. 103ff.

²⁶⁷ Ferrari d'Occhieppo, *Der Stern von Bethlehem*, p. 50.

of "Saturn the star of *Amurru*" (^{mul}*Kayyamānu kakkabu ša* ^{kur}*Amurri*).²⁶⁸ However, the geographic term *Amurru* has a very wide meaning. Since the 14th century BCE, *Amurru* was the name of a kingdom in the northern Levant, on the territory of todays' Syria and Lebanon. In the Hellenistic period, it was a name of Syria. In astrological texts, *Amurru* generally seems to refer to regions west of Babylon, but not necessarily to Judaea. More differentiated geographic information very rarely appears in cuneiform astrological texts.²⁶⁹ Usually, the texts contented themselves with the differentiation of the four cardinal directions, relative to the cities where they were written and used. Designations like "Jews" (*Iaḫudū*), "Hebrews" (*Habirū*), or "Palestinians" (*Palaštū*) do not appear in astrological texts. Therefore, only a very general association of Saturn with the "west" (*Amurru*) is attested.

Apart from that, it seems that the astrological assignment of the Jews or Palestine to the planet Saturn was widespread in Antiquity. Tacitus reports that the Jews abandoned themselves to inactivity on the seventh day and in the seventh year, thus on the Sabbath and in the Sabbath year, and since this day was the day of Saturn (Engl. Saturday), it was believed that thereby they wanted to honour Saturn, the highest and mightiest of the planets. Tacitus also relates that the Jews (Iudaei) originally were Idaeans (Idaei), i.e. people who originally lived on Mount Ida on Crete. In ancient times, when Zeus-Jupiter dethroned and exiled Saturn, the former king of the gods, the Jews accompanied the latter into exile, left Crete, and went to North Africa.²⁷⁰ The close association of the Jews with the planet Saturn was also familiar to Persian and Arabic astrologers. Christian astrologers in Europe later learned about it from Abū Ma'shar. In astrology, Saturn is known as the planet of laws, rules, prescriptions and prohibitions, and it is a fact that the daily life of Jews is heavily regulated by religious prohibitions and prescriptions, thus, astrologically speaking, characterised and - in astrological terminology -"ruled" by Saturn.

More problematic is the astrological interpretation of the zodiac sign or constellation of Pisces. Ferrari asserts that in ancient astrology, the zodiac sign of Pisces was assigned to the geographic area that extended from Lower Egypt to Mesopotamia and that Palestine was roughly located in the middle of his area.²⁷¹ An old cuneiform text that predates the invention of the twelve zodiacal constellations defines the eastern fish as the constellation of the goddess *Anunītu* and assigns it to the south (*Akkad*), whereas the western fish is interpreted as the constellation of the *swallow* and assigned to the west

²⁶⁸ 時千 道 云 时间 當 時千 平 生 间 庙, in Thompson, The Reports of the Magicians and Astrologers of Nineveh and Babylon in the British Museum, vol. 2, p. 57 and lxii. (80-7-19, 371 + p. 366) Also in: SAA 8 491.

²⁶⁹ Examples are given in Pettinato, *La scrittura celeste*, pp. 239ff.

²⁷⁰ Tacitus, *Historiae* 5.2 and 4; Dio Cassius, *Historia Romana*, 37,17f.

²⁷¹ Ferrari d'Occhieppo, Der Stern von Bethlehem, p. 51f.

(Amurru).²⁷² Now, while the three conjunctions of Jupiter and Saturn actually took place in the western fish and therefore could have been interpreted as pertaining to Amurru, it must be clear that the term Amurru has a wider meaning and does not necessarily refer to Israel. A cuneiform text from the Hellenistic period assigns Pisces and the other "watery signs" (Cancer, Scorpio) to the geographic area north of Babylon (Subartu), whereas the western countries (Amurru) are assigned to the "airy signs" (Gemini, Libra, Aquarius).²⁷³ For such reasons, the assyriologist Simo Parpola does not believe that it was the sign of Pisces that pointed to the west. Instead, he points out that the planet Mars (Nergal), which was associated with the west, joined Jupiter and Saturn after their third conjunction in the beginning of the year 6 BCE;²⁷⁴ furthermore, that the second conjunction took place in the month of Tashritu, which, astrologically, was also associated with the west.²⁷⁵ However, this interpretation is also rather speculative and arbitrary. Why should the astrological point of compass assigned to Mars - in this case the west have played an important part, whereas the point of compass of Jupiter, namely south, was irrelevant? And why should the month of the second conjunction²⁷⁶ have been of importance, however not the month of the first²⁷⁷ or the third conjunction²⁷⁸ or the month of the station²⁷⁹ or the month of the conjunction of Mars with Jupiter and Saturn?²⁸⁰ If Ferrari is followed, who interprets the "rising in the east" as the synchronous acronychal rising of Jupiter and Saturn in September 7 BCE and even believes he found support in a cuneiform almanac²⁸¹, then the month of *this* event should have been most important for astrological interpretations. In the Babylonian calendar, it fell into the month of Ulūlu, which was astrologically assigned to the east.²⁸²

²⁸¹ This text is discussed futher below on pp. 140ff.

²⁷² "The Great Star List", Koch-Westenholz, Mesopotamian Astrology, p. 197f.

²⁷³ BM 47494, vide Rochberg, The Heavenly Writing, p. 108.

²⁷⁴ Parpola, "The Magi and the Star", p. 19. The association of Mars with the west is found in the cuneiform text "The Great Starlist", in: Koch-Westenholz, *Mesopotamian Astrology*, pp. 196-199. Fotheringham even drew the conclusion that the Star of Bethlehem must have been Mars. (Fotheringham, "The Star of Bethlehem")

 $^{^{275}}$ Parpola, op. cit. The assignment of months to cardinal directions is found in Koch-Westenholz on pp. 202f. An online programme for the conversion of Gregorian calendar dates into Babylonian dates is found on R. H. van Gent's website: http://www.staff.science.uu.nl/~gent0113/babylon/babycal.htm .

 $^{^{276}}$ 1 Oct. 7 BCE = 6 Tašrītu = Amurru = west.

²⁷⁷ 29 Mai = 29 Ayyaru = Elam = east.

 $^{^{278}}$ 5 Dec. = 12 Kislīmu = Akkad = south.

 $^{^{279}}$ 12 Nov. = 19 Arahsamna = Subartu = north.

²⁸⁰ End February 6 BCE = Addaru = Subartu = north.

²⁸² 15 Sept. (evening) = 21 Ulūlu = Elam = east.

Returning to the astro-geographical interpretation of Pisces, it turns out that Claudius Ptolemy (*Tetrabiblos* 2.3) and Vettius Valens (*Anthology* 1.2) do not assign this zodiac sign to Lebanon and Palestine either, but rather to parts of Anatolia and North Africa, whereas the Levant and Palestine are assigned to Aries. The assignment of Pisces to Israel can only be found with Jewish authors of the High and Late Middle Ages, such as Abraham bar Hiyya (12th cent.) and Isaac Abravanel (15th cent.).²⁸³ Older testimonies for this view do not seem to exist. On the other hand, there are testimonies that the astrogeography of Ptolemy, who assigns Palestine to Aries, was also used by Jewish astrologers of the early Middle Ages in Egypt.²⁸⁴ Furthermore, Abraham ibn Ezra (12th cent.) is of the opinion that the zodiac sign of Israel is *Aquarius*. However, he does not attribute Aquarius exclusively to Israel, but also lists Egypt and Greece among its countries.²⁸⁵

Abravanel's arguments for Pisces as the zodiac sign of Israel read as follows:

כל זה יורה ההיות דגים ממזלות המים יש לו יחס על אומה ישראלית

ויותר פרטית להיות מזל דגים בין כל מזלות המים בית צדק ואברהם אבינו תחת צדק היה כמו שנראה ממזגו הישר וידו הרחבה ואמונתו וצדקתו והצלחתו ועשרו לכן חכמי הקבל

All this shows that among the watery signs, Pisces is the one that has a relationship with Israel.

And more concretely, [this is the case] because amongst all watery signs, Pisces is the house of Jupiter (χ); and our father Abraham was under [the influence of] Jupiter, as we have seen because of his straight character and his generous hand and his firmness and righteousness (χ r η r) and his success and his wealth.²⁸⁶

A few lines earlier, where he treats the "mighty conjunction" that allegedly announced the birth of Moses and the liberation of Israel, he writes:

אם כן איפה מן המחוייב שנודה שהמחברת הגדולה שהיתה בדגים היא באמת המחברת העצומה וראוי היה להיות בדגים המחברת העצומה להיות לב״ ככבים הטובים והישרים המאשרים ממשלת גדולה בזה המזל כי היא בית צדק ובית כבוד נוגה

²⁸³ Vide citations just below.

²⁸⁴ This is testified by an early medieval text fragment from Egypt (the Geniza of Cairo), which is discussed in: Leicht, *Astrologumena Judaica*, pp. 71ff.

²⁸⁵ Ibn Ezra, *Olam I*, 56.13 in: Sela, *Abraham ibn Ezra. The Book of the World*, pp. 88f.; cf. *Olam II*, 14.2, op. cit. pp. 164f. Vide also citations by this author below on pp. 157f.

²⁸⁶ Abravanel, קכ״ה), average ("The Sources of Salvation"), 128 (קכ״ה), left page (Hebrew only).

This being so then, where is the reason that we assert that the great conjunction that was in Pisces was truly the Mighty Conjunction? The Mighty Conjunction must be in Pisces because [this zodiac sign] belongs amongst the two good and right planets [namely Jupiter and Venus], which in this zodiac sign conduct a rulership of greatness; for it is the house [of the *domicile*] of Jupiter and the house of the *exaltation* of Venus.²⁸⁷

The "Mighty Conjunction" will be explained later. Thus, Abravanel considers Pisces as a particularly salvific zodiac sign because Venus and Jupiter, the two *benefic* planets, both have an astrological *dignity* in this sign, namely Jupiter one of his two domiciles and Venus her exaltation. Furthermore, it is interesting that Abravanel considers Jupiter the planet of Israel, rather than Saturn, which in astrology is considered a *malefic* planet. In addition, Jupiter, not Saturn, is considered to be the planet of Jewish righteousness and lawabidance, as is also obvious from its Hebrew name sädäk (צרק), which denotes "justice, righteousness". This name of Jupiter first appears in the Babylonian Talmud, which was created from the 3rd century CE on. (Shabbat 156a) In Jesus' time, Jupiter was probably still called by the name of the old Canaanite weather god Ba'al, who in the Near East pantheon played exactly the role of the Greek and Roman gods Zeus and Jupiter.²⁸⁸ Be that as it may, if one follows Abravanel and considers Pisces to be the zodiac sign of Israel, then one cannot at the same time consider Saturn the planet of Israel, as is done by Ferrari and his epigones. Abravanel's considerations are not in agreement with the astrological interpretation proposed by these authors for the Jupiter-Saturn conjunction in Pisces. Even if it were, the view of Abravanel and bar Hiyya, as has been stated already, is not based on an ancient Jewish tradition but on astrological speculation: Pisces has to be the zodiac sign of Israel because the benefic planets Jupiter and Venus both have an astrological dignity in this sign.

According to modern astrology, the zodiac sign of Pisces has a close connection with *religion*. Thus, it may seem attractive to interpret the Jupiter-Saturn conjunction in Pisces as indicating a "king (Jupiter) of religion (Pisces) among the Jews (Saturn)". Unfortunately, the astrological connection of Pisces with Religion is not supported by sources of ancient astrology.

Interestingly, however, the symbolism of Pisces played an important part in early Christianity. Jesus associated with fishermen, and the *fish* became an esoteric symbol for Christ himself. The Greek word *ichthys* ($i\chi\theta \dot{\alpha}\zeta$), which means "fish", was used as an abbreviation of the expression *l*esous Christos

²⁸⁷ ibidem, right page.

²⁸⁸ Stieglitz, "The Hebrew Names of the Seven Planets". Stieglitz compares the traditional names, as used since the Babylonian Talmud, with a list of planet names transmitted by Epiphanius (*Adversus Haereses (Panarion)* 15,2). An Old Testament testimony that Jupiter was called *Ba'al*, is found in 2nd Kings 23:5. This matter has been discussed by this author above on pp. 105ff.

Theou hYios Sotêr (Ίησοῦς Χριστὸς θεοῦ υἰὸς σωτήρ), in English: "Jesus Christ, Son of God, Saviour". Seymour supposes that this symbolism was derived from an astrological doctrine of historical ages that was based on the fact that in Jesus' time the vernal point was about to move from the constellation of Aries into Pisces. According to this doctrine, an "Age of Aries", which had lasted for 2000 years, was just about to end, and a new "Age of Pisces" was about to begin.²⁸⁹ This theory seems to be supported by the fact that the *ram* (in Latin: *aries*) also plays an important role in the Christian religion, namely as the "Lamb of God, that taketh away the sin of the world". Also interesting is the fact that the opposite sign of Pisces, namely *Virgo*, which became the sign of the autumnal equinox in Jesus' time, was linked with another symbolism essential to the Christian religion, namely with the virgin birth.²⁹⁰

Such considerations may in fact have been possible. The phenomenon of the precession of the equinox was, in principle, known since Hipparchus, al-though astrologers mostly ignored it even centuries after Ptolemy.²⁹¹ Furthermore, astrology and some ancient calendars considered the vernal point the *beginning and end* of the year, which may be reminiscent of Jesus' statement:

Έγὼ τὸ ἄλφα καὶ τὸ ὦ, ἡ ἀρχὴ καὶ τὸ τέλος.

I am the Alpha and the Omega, the beginning and the end. (Rev. 21:6; cf. 1:8)

Furthermore, Jesus preached the imminent dawning of a "new age", namely the "Kingdom of God".

²⁸⁹ Roberts, *The Star of the Magi*, pp. 159ff.; Seymour, *The Birth of Christ*, pp. 8-10. This idea of astrological ages has become very popular amongst adherents of "New Age" ideologies, who believe that the so-called "Age of Aquarius" is currently about to begin. Unfortunately, this idea is ill-conceived, because the vernal point will not enter Aquarius for several more centuries.

²⁹⁰ The symbol of the *fish* could also originate from Mesopotamia, where it was often depicted as a rhombus and used as a symbol of the personal protective deity. (Seidl, "The Roles Played by Fish on Neo-Assyrian Cylinder Seals", pp. 134-165 and pp. 238-240) The fish symbolism could also originate from the cult of the Semitic god Dagan/Dagon, who was considered either a god of fish (*x*₇) or a god of grain (*y*₇). In addition, there is Berossus' legend of the fish-man Oannes, who had allegedly brought the arts of civilisation to humanity. These historical connections may or may not be correct, but there is no known connection with the zodiac sign of Pisces in any of these cases. The Babylonians did not see a pair of fish in this part of the sky, but called it the "double tail of a swallow" (*zibbāt šinūnūti*, KUN.MEŠ ^{MUL}SIM.MAḪ).

The "ram", again, played an important part of old in Judaism, namely in the Passover Festival, but apparently had no astrological connotation at all. Of course, these facts do not rule out the possibility that these symbols could have been interpreted in an astrological context in early Christianity.

²⁹¹ Jones, "Ancient Rejection and Adoption of Ptolemy's Frame of Reference for Longitudes".

Nevertheless, it must not be forgotten that there are no ancient textual testimonies of such a doctrine of astrological ages. In reality, ancient astrologers did not care at all about the phenomenon of precession in their writings.

The explanation of the "star" as a Jupiter-Saturn conjunction was first proposed by the German Lutheran theologian Friedrich Münter, in a "Forschungsprogramm" ("research programme") he sent to various experts in astronomy and Jewish tradition, hoping that they could help him to resolve some questions.²⁹² Münter's impetus triggered great interest. Several experts reacted to it in fast succession and discussed the idea in their own publications²⁹³, even before Münter himself published an elaborate essay in the year 1827 under the title *Der Stern der Weisen – Untersuchungen über das Geburtsjahr Christi* ("The Star of the Wise – Investigations on the Birth Year of Christ").

Before studying the conjunction theories in detail, it might be useful to ask the question of whether and in what way it was possible at all to understand the "star" of the Messiah as a conjunction of planets. Is it possible that Matthew had a planetary conjunction in mind, when he was referring to *one* star only? Were the two planets standing so close to each other that the human eye could not discern them and they seemed to merge into one single source of light? In fact, this would have been an extremely rare and spectacular phenomenon. And this is exactly how Ideler in 1826 believed that the triple Jupiter-Saturn conjunction of 7 BCE had taken place:

Auch bei den letztern beiden Conjunctionen betrug der Breitenunterschied nur etwa einen Grad, so daß für ein schwaches Auge der eine Planet fast in den Zerstreuungskreis des andern trat, mithin beide als ein einziger Stern erscheinen konnten.²⁹⁴

Also in the case of the latter two conjunctions, the latitudinal distance amounted to only about one degree, so that for a weak eye, the one planet almost into the diffusion circle (Zerstreuungskreis) of the other, thus both could appear as one single star.

However, this was not the case. Jupiter passed Saturn within a considerable distance. As Ideler himself states, the two planets were separated by about one degree in ecliptic latitude even at the times of exact conjunction. This corresponds to a distance of two full moon diameters. Consequently, the two planets could not possibly have been seen as *one* object, not even for very weak eyes. In any case, they appeared as two light points that were quite far apart. One would have to assume that already in an oral tradition that pre-

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²⁹² The "programme" is found in: Pfaff, *Das Licht und die Weltgegenden*, pp. 166-171. Incidentally, just in June 1821 a Jupiter-Saturn conjunction took place in Aries.

²⁹³ Pfaff, *Das Licht und die Weltgegenden* (1821), pp. 166-182; von Zach, *Correspondance astronomique, géographique, hydrographique et statistique* (1822), vol. IV, pp. 567ff.; Schubert, *Vermischte Schriften* (1823), pp. 71ff.; Ideler, *Handbuch der mathematischen und technischen Chronologie* (1826), vol. 2, pp. 405ff.

²⁹⁴ Ideler, Handbuch der mathematischen und technischen Chronologie, vol. 2, pp. 407.

ceded Matthew's Gospel, the true astronomical situation had been distorted or simplified. Over time, lay people may have misunderstood a conjunction of two planets as the merging to one single star. However, it can be stated that there is a clear disagreement between this theory and the information given by Matthew.²⁹⁵

Even Ferrari in his book *Der Stern von Bethlehem* is not able to refrain altogether from the idea of a "merging of stars". He explains Matthew's expression "his star" by the fact, that according to Babylonian calculation methods, the two planets became stationary almost synchronously and within a distance of *only three arc minutes*, ignoring the ecliptic latitude, which was not considered in ancient planetary theories.²⁹⁶ However, textual evidence from ancient sources would be desirable, showing that a conjunction could be called "*one* star". Even then, the question would remain unanswered as to why Matthew does not make it clear that *two* planets were involved in the astronomical configuration on Jesus' birthday.

Ferrari also provides an alternative answer to the question of how Matthew could have mentioned *one* star and still have had a conjunction in mind. He thinks that the *magi*, although predicting the birth of the Messiah based on a conjunction of *two* planets, still referred to the more dominant planet as "His star", namely to Jupiter, which was 15 times brighter than Saturn.²⁹⁷ However, even then it remains unexplained why Matthew did not mention the *important* circumstance of a *conjunction*.

A very different explanation for the fact that there is talk of only one "star" is given by Münter. He states that the Greek term $ast\bar{e}r$ (ἀστήρ) used by Matthew, although actually denoting "star", could also have been used in the fuzzier meaning of the word *astron* (ἄστρον), which not only denoted "star", but also "constellation" or possibly even other celestial phenomena. He therefore considers it possible that Matthew uses the word *astēr* in a very wide sense, even possibly for a conjunction of two or more planets. Moreover, he states that the Hebrew word $k\bar{o}k\bar{a}b$ (cicc) has a comparable

²⁹⁵ While it does happen that Jupiter occults Saturn, this occurrence is extremely rare. It last happened on 4 June 6857 BCE and will occur again only in the year 7541 CE, however twice within the same year, on 17 February and 18 June. (Calculation by Aldo Vitagliano using his software Solex;

http://chemistry.unina.it/~alvitagl/solex/Jusatocc.txt)

²⁹⁶ Ferrari d'Occhieppo, Der Stern von Bethlehem (1991), p. 47.

²⁹⁷ "There is no difficulty in understanding that, notwithstanding the fact that the coincidence of two equally named phases of *two* planets in the same constellation formed the basis for the astrological prediction, only Jupiter, the dominant planet, was particularly spoken of as 'his star.'" (Ferrari d'Occhieppo, "The Star of the Magi and Babylonian Astronomy", in: Vardaman/Yamauchi (ed.), *Chronos, Kairos, Christos* (1989), p. 47; idem, *Der Stern von Bethlehem* (1994), pp. 170f.)

ambivalence.²⁹⁸ However, the question must be asked whether it is likely that Matthew wanted to leave the matter so unclear. To the contrary, the usage of the word *astēr* instead of *astron* seems to indicate that he *does* mean *one single* celestial body. As long as there are no compelling contradictory reasons, the adequacy of Matthew's expression should not be doubted.

In addition, Matthew's talk of the "appearance" of the star does not accord with the way a planetary conjunction develops. A conjunction does not "appear" (*phainesthai*), but it evolves, or comes about. A suitable Greek term for this kind of process would have been *gignesthai*, "to become, to come about" (not *phainesthai*!). Moreover, when the conjunction first became exact on the 29th May, it was not a phenomenon of the eastern morning sky anymore. Finally yet importantly, the "appearing" cannot refer to a heliacal rising of the conjunction. For when the two planets appeared in the east, they were still far away from each other and therefore not in conjunction. Saturn actually rose several weeks after Jupiter.

However, Ferrari is of the opinion that Matthew does not refer to a morning (heliacal) rising but to an evening (acronychal) rising of a star, or actually a *joint acronychal rising of Jupiter and Saturn*. Indeed, this kind of event is not necessarily unspectacular, especially not for passionate stargazers. When Jupiter makes its acronychal rising, then it is in opposition to the Sun, therefore reaches its greatest brilliancy and crosses an important point in its synodic cycle. When Saturn does the same synchronously, this is certainly extraordinary, although Saturn becomes far less bright than Jupiter. A similar occurrence in the constellation of Pisces took place 854 years before and after the one of the year 7 BCE, thus is extremely rare.²⁹⁹

Consequently, Ferrari believes that the magi must have attributed very great importance to this astronomical event. He tries to prove it by reference to a cuneiform almanac that indicates the positions of the planets in the year 7 BCE and in fact mentions that Jupiter and Saturn made their acronychal rising on the very same day, on 15 September.³⁰⁰ That is, the two planets stood close to each other in opposition to the Sun and appeared in the evening, shortly after sunset above the eastern horizon.

Unfortunately, proponents of the Jupiter-Saturn theory refer to the cuneiform almanac in a misleading way. In reality, it does not support but contradicts this theory. For every month, the almanac states in which zodiac signs the planets are located and on which dates they make an ingress into a different sign. In addition, the dates of heliacal risings and settings of the planets, the dates of their acronychal risings and their stations, as well as the dates of new and full moon are given. Interestingly, however, the almanac does not show

²⁹⁸ Münter, Der Stern der Weisen, pp. 19-21; 48f.

²⁹⁹ Ferrari d'Occhieppo, Der Stern von Bethlehem (1994), p. 52.

³⁰⁰ Ferrari d'Occhieppo, ibidem, p. 45f.

any interest in the calendar dates of exact conjunctions. The fact considered so important by Ferrari, namely that the planets made their acronychal rising *on the same date*, is not expressly mentioned in the text, although in fact it can be inferred from it. The original text reads as follows:

Ulūlu 30 Kakkabu-peşû(MUL.BABBAR) u Kayyamānu ina Zibbāti Delebat ina zibānīti Ṣalbatānu ina Zuqaqīpi 12 Delebat Zuqaqīpa ikaššad 14 nanmurtu(NA) 21 Kakkabu-peşû ana mūši uṣşâ 21 Šiḥtu ina ereb (!) Šamši innammar (!) itteq 21 Kayyamānu ana mūši uṣşâ 28 Ṣalbatānu Pabilsag ikaššad 28 nipḥu(KUR)

Month Ulūlu, [beginning on the] 30th [of the preceding month]: Jupiter and Saturn are in Pisces, Venus in Libra, Mars in Scorpio. On the 12th: Venus reaches Scorpio. On the 14th: full moon. On the 21st: Jupiter rises at the [beginning of the] night. On the 21st: Mercury appears at sunset; missing. On the 21st: Saturn rises at [the beginning of] the night. On the 28th: Mars reaches Sagittarius. On the 28th: [last moon]rise [before sunrise].³⁰¹

Although it happens extremely rarely that both planets make their acronychal rising on the same day, the text does not seem to be interested in this fact. The two acronychal risings are not even mentioned next to each other, but are *separated* by the mention of the first evening appearance of Mercury, which took place in the opposite region of the sky. The 21st of Ulūlu in the Babylonian calendar began in the evening that preceded 15 September 7 BCE. On this day, Jupiter and Saturn were separated by only one degree in ecliptic longitude.

Moreover, it is interesting that the almanac does not mention the conjunction at all. Of course, ancient astronomers would have known that the acronychal rising of a planet roughly coincided with the planet's opposition to the Sun. Thus, the almanac did contain the information about the conjunction of the two planets in opposition to the Sun, i.e. the user was able to infer it. However, it is interesting that the conjunction is not expressly stated. Was this kind of information considered irrelevant? Were acronychal risings, conjunctions, and oppositions unimportant for Babylonian astrology?

This conclusion would at least be in agreement with the extant cuneiform natal horoscopes. On the one hand, they did contain information about stations and first and last visibility or invisibility of a planet if these took place near the birth date. However, acronychal risings are never mentioned, nor are conjunctions or oppositions.³⁰² Babylonian birth horoscopes usually only give the positions of the planets, and mostly in a very rough manner, only indicating the

³⁰¹ Transcription and translation D.K. based on Sachs/Walker, "The Star of Bethlehem and the Babylonian Almanac for 7/6 B.C.".

³⁰² Rochberg, *Babylonian Horoscopes*.

zodiac signs, ignoring the degrees. Exact conjunctions or aspects cannot be obtained from them. This is in agreement with what is known from Greek and Latin authors like Ptolemy, Valens, or Firmicus Maternus, who consider two planets to be in conjunction as soon as they are in the same zodiac sign. Exact conjunctions with degree accuracy, by contrast, were not relevant for the astrological interpretation. It seems that the same held true for Mesopotamian astrologers of the Hellenistic period. Some readers may find it hard to accept this conclusion. A modern sky gazer would certainly be impressed by a narrow conjunction of planets, but would not be interested in the fact that two planets that are far away from each other are in the same zodiac sign. However, the methods of ancient astrology are not discovered based on the ideas or speculations of present-day researchers, but only based on historical sources.

Moreover, it should not be taken for granted that the magi were aware of the rareness of the phenomenon and therefore would have attached great astrological importance to it. The almanac of 7 BCE, at least, completely ignores it. Parpola has pointed out that the almanac of this year is preserved in four copies, unlike the vast majority of cuneiform almanacs, which exist in only one copy. From this, he draws the conclusion that triple conjunctions were considered very important. However, this remains mere speculation, especially when Parpola himself states that almanacs of the years 71 and 69 v. Chr. are also preserved in four or more copies.³⁰³

It is also quite understandable why acronychal risings were considered irrelevant or less important in astrology. An evening rising immediately after sunset is not really an "appearance" (*phainesthai*) of the planet, in contrast to its matutinal *heliacal* rising. The planet was also observable during the previous nights, with the only difference that it rose a bit later in the evening. By contrast, in the case of a heliacal rising, the planet appears after a period of invisibility, when it was too close to the Sun to be observed. For this reason, Matthew's statement that the star "*appeared*" (*phainesthai*) does not accord at all with an acronychal rising, but does accord very well with a heliacal rising. Aside from that, it has already been pointed out how important heliacal risings were in ancient astrology. Acronychal risings, by contrast, were only relevant for astronomical purposes. They were used as planetary orbital parameters in planetary theories, along with the dates of heliacal risings, settings, and stations.

As has been stated already, Matthew's talk of an "appearance" (*phainesthai*) of the star does not fit a conjunction. Then, how about the other modes of behaviour of the star, its "going before" (*proagein*), which has been interpreted as its retrograde motion, and its "station" (*stathēnai*)? If the "appearance" or "rising" is interpreted as the star's *heliacal* rising, then it fits neither Jupiter nor Saturn, because both of them are in direct motion during their heliacal rising. In addition, the two did not appear synchronously, but Jupiter

³⁰³ Parpola, "The Star of the Magi", p. 17 and footnote p. 60.

made his heliacal rising about three weeks before Saturn. Retrograde motion during the heliacal rising only occurs in the case of Venus. Jupiter and Saturn would only have been retrograde if "appearance" and "rising" had been acronychal. About two months later they would have made a station.

Ferrari was not yet aware of Molnar's idea that the "going before" of the star could indicate its retrograde motion. Instead, he believed that the two planets *stood in front of* the *magi* when they wandered from Jerusalem to Beth-lehem.³⁰⁴ Since Bethlehem is in almost directly south of Jerusalem, the two planets would have stood in culmination in the south. Near the date of their acronychal rising in mid-September that would have been the case around midnight; two months later, in November, in the early evening hours.

Ferrari did believe, however, that Matthew was referring to a planetary station. According to Babylonian astronomical calculation, Jupiter's station would allegedly have taken place on 12/13 November 7 BCE.³⁰⁵ Of course, this would have been mere calculation, not observation, because Jupiter and Saturn move so slowly that their stations cannot be detected with the naked eye, at least not with day accuracy, let alone with hour accuracy.

Ferrari also put into play another phenomenon in order to explain the "standing above where the child was", namely the so-called zodiacal light, which constantly "pointed" to the same place on the horizon for several hours. The zodiacal light is a faint white glow that can be seen after sunset in western direction, if the sky is very clear and dark. It is produced by the reflection of sunlight from dust particles that are in the orbital plane of the planets. Around 12 November 7 BCE after 7 p.m., the zodiacal light could be observed as a light cone that seemed to radiate from Jupiter and shine down on the horizon. Ferrari calculated that this light cone constantly pointed to the same place on the horizon from 7 to 9 p.m., although the planets themselves moved a considerable distance during the same time. Therefore, he believed that it could have been this light cone that made a "station".³⁰⁶

Examining Ferrari's calculations, it turns out, indeed, that the planets were roughly in southern direction between 7 and 9 p.m., moving from azimuth 340° to 25° within the same period of time. Also, it is true that the cone of the zodiacal light constantly pointed to the same place on the horizon. However, this place was not due south, but in a west-south-westerly direction, near azimuth 63° . Consequently, the "station" was rather useless to the *magi*. They could have notice the station only if they had either stayed in the same place for two hours or wandered exactly in the direction of this point on the horizon. The latter can be ruled out, because Bethlehem was in a south-

³⁰⁴ Ferrari d'Occhieppo, *Der Stern von Bethlehem*, p. 66.

³⁰⁵ Ferrari's calculation using Babylonian methods. The cuneiform almanac is unfortunately broken in the place in question. (*Der Stern von Bethlehem*, pp. 43f.)

³⁰⁶ Ferrari d'Occhieppo, *Der Stern von Bethlehem*, pp. 66-68.

ern, not west-south-westerly direction from Jerusalem. Only if they had already arrived in Bethlehem at 7 p.m. and had sat down and observed the sky for two hours, they could have noticed the phenomenon. Unfortunately, there are no testimonies in ancient texts that prove that ancient astrologers or astronomers made this kind of observation.

The British astrologer Bernadette Brady proposed another clever solution for the "going before" and the "standing" of the star. She believes that the magi themselves represent the three planets Mars, Jupiter, and Saturn, which formed a conjunction at the end of February 6 BCE and all made their heliacal setting in fast succession in March.³⁰⁷ At the same time, Venus, which had appeared as the morning star in the previous November, continued travelling in a southward direction, until in mid-January she made a "standstill", reversed her motion, and wandered in a northward direction again. It must be noted that here the "standstill" is not the same as a planetary station. A station of a planet is usually defined relative to the ecliptic, but Brady is referring to a "station" relative to the horizon, observed before sunrise.³⁰⁸ Brady here proposes a new interpretation of the "station" of the star. Unfortunately, however, there are no testimonies in ancient sources that prove that this kind of observation was actually made or considered astrologically relevant. In addition, this phenomenon could only be noticed if the position of Venus was observed before sunrise over a period of several days or even weeks. It could not be observed on one single morning, and it could not be calculated either. Interestingly, Brady seems to believe that Venus was the Star of Bethlehem and that it made a heliacal rising, although the Jupiter-Saturn-Mars conjunction plays an important part for her, too.

Jupiter-Saturn conjunctions occur about every 20 years, thus are not uncommon. In Pisces, they are not particularly rare either. They can take place in the same zodiac sign every 59 years for about 3 to 6 times and then occur in other signs for several centuries. Some proponents of the Jupiter-Saturn theory believe that the conjunction of 7 BCE was particularly extraordinary because the two planets made three conjunction within the same year. Such a triple conjunction is a very rare event, indeed, especially if it one wants it to occur in a particular zodiac sign. Between 5000 BCE and 5000 CE, only

³⁰⁷ Brady, "The Star of Bethlehem and Luke's Shepherds: an Exploration of the Astrological Features of the Two Nativity Stories" (2013).

³⁰⁸ Venus made her heliacal rising on 10 November 7 BCE and became stationary (relative to the ecliptic) on 25 November. As to her position relative to the horizon at sunrise, she wandered in a southward direction until 15 January 6 BCE, when she reversed direction at azimuth 328.7° (\approx 148.7° nautical azimuth) and began to wander in a northward direction. Brady provides slightly different values. In her opinion, Venus was not observed at sunrise, but at the moment she disappeared in the day-light. However, this view is problematic, because in a clear sky Venus can even be observed during the day, as long as one knows precisely where to find her. The best help for orientation would be a lunar crescent in her vicinity.
five triple conjunctions can be found in Pisces, the last of which occurred in 7 BCE, and the preceding one in 861 BCE.³⁰⁹

The triple conjunction of 7 BCE was first noticed by Kepler:

Fuit igitur illa magna conjunctio potior hac nostra, quod pro conditione motuum tunc temporis conjunctiones Saturni et Jovis potuerunt esse una vice tres, sicut hodie duorum illorum oppositiones possunt esse quinque, conjunctio tantum una.

That great conjunction was thus more powerful than this our [conjunction], for because of the nature of the motions at that time, *three* conjunctions of Saturn and Jupiter were possible instead of one, whereas today five oppositions of those two are possible, but only one conjunction. (Note by D.K.: In the years 1593-1594 Jupiter and Saturn formed five exact oppositions before separating again. The subsequent conjunction of 1603 however, was a single one.)³¹⁰

However, the fact that the conjunction took place in Pisces was irrelevant in Kepler's view. What he considered important was the fact that it occurred *near the vernal point*. The first author to refer to a triple conjunction *in Pisces* was Friedrich Münter in the year 1821.³¹¹ He was influenced by Jewish sources, as will be seen shortly. The idea was taken up by the German astronomer Christian Ludwig Ideler in 1826 and formulated as follows:

Hegten nun wirklich die jüdischen Astrologen große Erwartungen von einer Zusammenkunft der beiden obern Planeten im Gestirn der Fische, so mußte ihnen gerade diese von der größten Bedeutsamkeit erscheinen. Die beiden Planeten gingen nämlich dreimahl vor einander über, rückten dabei auch der Breite nach ganz nahe zusammen, und zeigten sich in der Nacht hindurch Monate lang bei einander, als wenn sie sich gar nicht wieder trennen wollten. Ihre erste Zusammenkunft in Osten erregte die Aufmerksamkeit einiger speculierenden Chaldäer. Sie erwarteten den Messias, der nach alten Weissagungen zu Bethlehem geboren werden sollte, und machten sich auf den Weg, um ihm ihre Huldigungen darzubringen. Als sie in Jerusalem ankamen, zeigten sich die beiden Planeten aufs neue in Conjunction, und zwar in den Abendstunden am südlichen Himmel, und sie folgten dieser Richtung, die sie zur Stelle brachte. Sehr natürlich ist wohl die Annahme, daß Christus geboren wurde, als die Planeten noch nahe bei einander waren, am Schluß des Jahres 747 ...³¹²

³⁰⁹ If the tropical zodiac is used, the following years are found for triple conjunctions in Pisces (astronomical year count): -4891, -3362, -2508, -860, -6, and 848. However, the year 848 has actually only a close encounter of the planets instead of a second and third conjunction. On the other hand, if the Persian sidereal zodiac is used, then there were triple conjunctions in Pisces in the following years: -2806, -1883, -979, and -6. Incidentally, triple conjunctions in other zodiac signs are of similar rarity, because they all require that the Earth also be aligned with Jupiter and Saturn at the same time as seen from the Sun.

³¹⁰ Kepler, Opera omnia II, pp. 708f.

³¹¹ Münter, Der Stern der Weisen, pp. 54ff.

³¹² Ideler, Handbuch der mathematischen und technischen Chronologie, vol. 2, pp. 407f.

Now if the Jewish astrologers really cherished great hopes from a conjunction of the two outer planets in the constellation of Pisces, then they must have considered this one of greatest importance. For, the two planets passed each other three times, also moved very closely together in latitude, and showed themselves together for months during the night, as if they did not want to separate anymore. Their first conjunction in the east awakened the attention of some speculating Chaldeans. They expected the Messiah, who according to ancient prophecies would be born in Bethlehem, and started on their way in order to pay him homages. When they arrived in Jerusalem, the two planets again showed themselves in conjunction, namely in the evening hours in the southern sky, and they followed this direction and were led to the place. The assumption seems very natural that Christ was born when the planets were still close to each other, in the end of the year 747 (from the foundation of Rome = 7 BCE; D.K.)...

At first glance, it may seem plausible that Babylonian astrologers would have been interested in such an extremely rare celestial event and that they would have tried to interpret it as an omen and to predict historical events from it. However, to this author's knowledge, there are no testimonies in the entire ancient astrological literature that this was actually done, either in Latin or Greek or cuneiform sources. Returning to the cuneiform almanac discussed further above, the three dates of exactness of the conjunction cannot be determined from the text. It was not even easy to infer the triple conjunction from the text. While the triple conjunction actually follows from the fact that the two planets made their acronychal rising on the same day, standing in approximate conjunction and in opposition to the Sun, these are complicated considerations and not easy at all. If the triple conjunction was considered as important as some believe, then why is it not expressly mentioned in the almanac? Obviously, the almanac would not have been a useful tool for astrologers who were interested in precise conjunctions. The magi would have had to bring in additional tools or calculations. Not that they lacked the required astronomical knowhow. However, the almanac was obviously insufficient. In fact, Ferrari realised this problem and gave up the idea that the *magi* considered the tripleness of the conjunction important. However, he continued to hold on to the importance of the synchronous acronychal rising of Jupiter and Saturn, which was a side effect of the triple conjunction.³¹³

To sum up, the following points weaken the theory of the triple Jupiter-Saturn conjunction in Pisces in the year 7 BCE:

- The idea that ancient astrology considered *triple conjunctions* more important than single conjunctions may seem plausible to a modern astronomer or astrologer. However, this is mere speculation, because there are no ancient sources that support it.

³¹³ Ferrari d'Occhieppo, *Der Stern von Bethlehem* (1994), pp. 132 and 170. Vide also *Der Stern der Weisen* (1969), pp. 58f.

- The idea that ancient astrologers paid special attention to a *synchronous acronychal rising* of Jupiter and Saturn on the same date is also mere speculation. It is not supported by cuneiform or Hellenistic sources.

- The idea that conjunctions in Pisces were considered more important than conjunctions in other zodiac signs, is mere speculation, too. This issue will be studied in detail shortly.

- Also, the assumption that ancient astrologers were aware of the extreme rarity of a triple conjunction in Pisces or of a synchronous acronychal rising of Jupiter and Saturn is mere speculation.

From all this it is evident that *it is nothing but speculation and in fact very unlikely* that the *magi* made considerations of this kind. Also, it should be kept in mind that Matthew does not mention, and not even allude to, Jupiter or Saturn or Pisces or a conjunction, let alone a triple one.

Strobel even tried to increase the importance of the triple conjunction in 7 BCE by asserting that it occurred near the vernal point.³¹⁴ However, the first of the three conjunctions, which took place on 29 May and was closest to the vernal point, was at 21° Pisces in the tropical zodiac, thus 9° away from the vernal point. This is actually not very close. Nor was it very close to the initial point of the Babylonian sidereal zodiac, in which the stars Aldebaran and Antares were in the middle of the zodiac signs Taurus and Scorpio,³¹⁵ namely at 24° Pisces, thus 6° away from the zero point. Nor does it help to make use of the Indian-Persian zodiac, where the star ζ *Piscium (Revati*) marks the boundary of Pisces and Aries. Although the conjunction would actually fall on the initial point of this zodiac, its alleged use in 7 BCE is unfortunately a gross anachronism.³¹⁶ The fact that ancient astrologers were actually confused about the exact position of the vernal point in the sidereal zodiac may be of some relevance in this discussion.³¹⁷ However, it is obvious that this is very speculative ground. A lot closer to the vernal point was the conjunction on 26 March 54 CE, taking place only three days after the vernal equinox. If the vernal point had played such an important part, then this conjunction would have been the most likely indicator of an astrological "new age".

³¹⁴ Strobel, "Weltenjahr, Große Konjunktion und Messiasstern", pp. 1000; 1007ff.

³¹⁵ Kugler, *Sternkunde und Sterndienst in Babel* II, 2. Teil, p. 513; Huber, "Über den Nullpunkt der babylonischen Ekliptik".

³¹⁶ This zodiac was only defined in the 6th century CE, when the vernal point was near this star. The Indian astronomical compendium *Sūryasiddhānta* assumed the vernal point at the beginning of Aries (14.7-10) and near the star $\zeta Piscium/Revat\bar{i}$ (1.27ff; 8.1ff.). The Persian planetary tables ($Z\bar{i}j$) were derived from the Sūryasiddhānta. The text can be dated to the 6th century with great certainty, because the ephemerides that result from its older version are most accurate near the year 500 CE, and their inaccuracy increases the more one goes into the past or future.

³¹⁷ Neugebauer, A History of Ancient Mathematical Astronomy II, pp. 594ff.

Some authors believe that this triple conjunction of Jupiter and Saturn was made more relevant by the addition of Mars at about the same time. In February/March 6 BCE all three outer planets formed a conjunction in the constellation Pisces; however, in the sidereal zodiac used by ancient astrologers, Jupiter was already in Aries. Since Jupiter-Saturn conjunctions, and especially triple ones, form over a longer period, it is not unusual that the fast Mars also joins them. However, Tipler asserts that a conjunction of the three outer planets in Pisces was believed to indicate births of rulers, and he gave a reference in Ptolemy's Tetrabiblos which allegedly proved this view.³¹⁸ So let this text be studied more closely:

ίδίως δὲ τρεῖς μὲν ἄρρενας πληροφοροῦσιν ὑπὸ τὴν τῶν Ἀνακτόρων γένεσιν ἄμα τοῖς προκειμένοις τόποις ἐν δισώμοις συσχηματισθέντες Κρόνος, Ζεύς, Ἄρης: τρεῖς δὲ θηλείας ὑπὸ τὴν τῶν Χαρίτων Ἀφροδίτη, σελήνη μεθ' Ἐρμοῦ τεθηλυσμένου· δύο δ' ἄρρενας καὶ μίαν θήλειαν ὑπὸ τὴν τῶν Διοσκούρων Κρόνος, Ζεύς, Ἀφροδίτη· δύο δὲ θηλείας καὶ ἄρρενα ἕνα ὑπὸ τὴν Δήμητρος καὶ Κόρης Ἀφροδίτη, σελήνη, Ἀρης·

Under the "nativity of the Rulers" in particular, Saturn, Jupiter, and Mars bring about multiple births of three boys, if they form aspects while [the Sun, the Moon, and the Ascendant] are located in the above-mentioned places (= houses) in bicorporeal signs. (*Robbins renders the same sentence as follows: "in particular, they give multiple birth, to three males, by the geniture of Kings, when Saturn, Jupiter, and Mars are in bicorporeal signs and bear some aspect to the aforesaid places"*; D.K.) However, Venus and the Moon, together with Mercury in a female [position], [bring about multiple births of] three girls under [the nativity of] the Graces. Saturn, Jupiter, and Venus [bring about] two boys and a girl under [the nativity of] the Dioscuri. And Venus, the Moon, and Mars two girls and a boy under [the nativity of] Demeter and Persephone (Cora).³¹⁹

At first glance, it becomes already evident that this text does not deal with births of kings at all, but births of triplets. The only possible clue to births of kings seems to lie in the fact that under certain circumstances, a conjunction of Jupiter, Saturn, and Mars is called a "nativity of rulers". However, the context makes it clear that the word "kings" or "rulers" (Greek *anaktores*) here does not refer to mortal kings but to some gods, namely the Cabeiri (Káβειροι). Thus, the text is not about births of kings, but about births of triplets that are under the control of some gods who are called "the Rulers". In addition, the triplets born do not necessarily have royal character, but are only characterised by male gender.

Still, the question may be raised whether a nativity that is controlled by *anaktores* could not bring about earthly rulers. Vettius Valens writes:

³¹⁸ Tipler, "The Star of Bethlehem" (2005), p. 170.

³¹⁹ Ptolemy, *Tetrabiblos* III.7.

Κρόνος Ζεὺς Ἄρης συγκράσεις ἀγαθῶν ἀποτελοῦσι· τινὰς μὲν οὖν ἐνδόξους, ἀρχιερατικούς, ἡγεμονικούς, ἐπιτροπικούς, ὄχλων καὶ χωρῶν προεστῶτας ἢ στρατιωτικῶν πραγμάτων, κελεύοντας καὶ ἐνακοθομένους...

Saturn, Jupiter, and Mars bring about mixtures of *good* [characters]: some [men] of reputation, high priests, leaders, administrators, chiefs of masses and countries or army affairs, [men] who command and are obeyed...³²⁰

It is obvious that kings may or may not be included here. Returning to Ptolemy, the so-called "bicorporeal" signs are Gemini, Virgo, Sagittarius, and Pisces.³²¹ According to Robbins' translation, at least, the configuration of Jupiter, Saturn, and Mars in Pisces in 6 BCE would fit the text and hence it would indeed be a "nativity of the Rulers", although it must be added that a conjunction in Gemini, Virgo, or Sagittarius would have fit just as well. However, the context of the passage seems to indicate that the conjunction could take place in *any* zodiac sign and that only *the Sun, the Moon, and the ascendant* have to be located in a "bicorporeal" sign. For this reason, this author's translation differs from Robbins'.

Aside from that, it has already been pointed out that in late February and early March 6 BCE, when Mars joined Jupiter, the latter was not in Pisces anymore, at least in the then sidereal zodiac, but already in Aries. Tipler's date, 22 March 8 BCE, does not accord with Ptolemy's statement either, because the planets stood too far apart and were scattered over three zodiac signs (or two constellations).

³²⁰ Vettius Valens, Anthologie, I.20.

³²¹ Tetrabiblos I.11. In modern-day astrology, the same zodiac signs are "mutable".

Jupiter-Saturn Conjunction Cycles (Older Theories)

As has been stated already, there was also another reason why Kepler considered the conjunction in 7 BCE particularly important. Conjunctions of Jupiter and Saturn occur about every 20 years, and they do so according to a pattern that has fascinated astrologers since the early Middle Ages. The places in the zodiac where three subsequent conjunctions take place, roughly form a great trigon, or, if drawn in a horoscope circle, an equilateral triangle. Now, zodiac signs that are in trigon to each other belong to the same astrological element. E.g., Aries, Leo, and Sagittarius are fire signs; Taurus, Virgo, and Capricorn earth signs; Gemini, Libra, and Aquarius air signs; and Cancer, Scorpio, and Pisces water signs. Three signs that belong to the same element are called a *triplicity*.

Thus, Jupiter-Saturn conjunctions tend to occur in the same triplicity. However, this holds only for about 200 years. The trigon slowly moves through the zodiac and eventually leaves the fire triplicity and enters the earth triplicity. About 200 years later, it enters the air triplicity, then the water triplicity, and after completing the whole cycle of about 800 years, it returns to the fire triplicity. Strictly speaking, the transitions are somewhat fuzzy, because during some transition period, conjunctions can take place in two elements.³²²

³²² Literature provides divergent information about the length of the cycles. This author has examined the period 5000 BCE to 5000 CE and found the following figures: If the *tropical* zodiac is used, then the conjunctions remain in the same triplicity for 201 years on average, which is somewhat more than 10 cycles, and after 803 years or 40 cycles the first triplicity recurs. However, if one reckons from the first conjunction in Aries to the first one in the subsequent cycle, then the duration is either 794 years or 854 years, i.e. either 40 or 43 cycles.

Slightly different periods result if a *sidereal* zodiac is used. Then the duration of a triplicity amounts to an average of 221 years, thus slightly more than 11 cycles, and the whole period until the return of the initial triplicity equals 882 years or 44 cycles. From the first conjunction at the beginning of sidereal Aries to the beginning of the next such event in the next great cycle, it is either 854 or 914 years, corresponding to either 43 or 46 cycles.

However, Persian astrologers give different figures. According to *Abū Ma'shar*, conjunctions remain in the same triplicity for 240 years, and the greater cycle lasts 960 years. However, from the angular distance he assumes between two subsequent conjunctions and from the time difference between them, the exact period used by him results in 245.9 years for a triplicity and 983.7 years for the greater cycle. (Abū Ma'šar, *Book of the Religions and Dynasties*, I.1.16, in: Yamamoto/Burnett, *Abū Ma'šar on Historical Astrology*, vol. 1, pp. 12f.) With *Masha'allah* the resulting durations are 243.6 and 974.4 years, according to this author's calculations based on information given by Kennedy and Pingree (pp. 69ff.). The error in these figures may be explained as follows: If a conjunction occurs exactly at the initial point of Aries, then the first

Persian astrologers first came up with the idea, probably during the Sassanian period $(3^{rd} - 7^{th} \text{ century CE})$, to develop an astrological theory of history based on these astronomical facts. They tried to explain and even predict important historical changes using Jupiter-Saturn cycles, like e.g. the birth of or seizure of power by great rulers, the formation of new kingdoms or empires, and the appearance of great prophets or new religions. Greater changes were obviously expected with the ingress of the conjunctions into a new triplicity or astrological element, which was assumed after 240 years. The horoscope of this initial conjunction, which was calculated for the spring equinox of the same year, was used by them to make predictions for the new 240-year period. Even more significant, in their view, was the moment when after four 240-year periods the fire triplicity recurred. The first conjunction in the fire triplicity, which according to this theory, took place after 960 years, was called a "great conjunction" (الدور الاعظم). The change of element, which took place after 240 years, was called a "middle conjunction (الدور الملل) or a "conjunction of religion" (الدور الأوسط). Finally, the simple conjunction that recurred every 20 years a "small conjunction" 323. (الدور الاصغر)

The Jewish astrologer Abraham bar Hiyya also introduced a greater super cycle of three "great conjunctions", which he called a "mighty conjunction" (הדבוק העצום). According to him, the duration of this cycle was 2859 years, or, as has been stated, three great conjunctions (= 3 x 953) or 12 "middle conjunctions" or 144 "small conjunctions".³²⁴

one taking place in the following sign Taurus occurs only after 238 years. However, it must be taken into account that, if the first conjunction taking place in Aries does *not* occur exactly at the beginning of Aries, then the first conjunction in Taurus may occur already after 179 years. Thus, if one calculates the duration of the greater cycle by multiplying 240 years by 4, the result is 960 years, which is much too high.

³²³ Arabic terminology according to: Yamamoto/Burnett, *Abū Ma 'šar on Historical Astrology*, vol. 1, p. 60 (2.3.3).

³²⁴ However, Bar Hiyya's terminology diverges from that of the Arabs. He calls the 20-year period a "small conjunction" (דבק קטון), whereas the 60-year cycle, which brings the conjunction back to the same zodiac sign, is called a "middle conjunction" (דבק גדול), the 238-year cycle a "great conjunction" (דבק גדול), the 953-year cycle a "main conjunction" (דבק עצום), and the 2859-year cycle, as has been stated, a "mighty conjunction" (דבק עצום). This author consistently uses the Arabic terminology in order to avoid confusion.

The super cycle of a "mighty conjunction" may be explained as follows: When a triplicity is assumed to begin in a particular sign, e.g. in the watery sign Pisces, secondly, when this is assumed to be a great conjunction, and thirdly, when it is assumed that a "middle conjunction" schematically lasts 238 years or 12 small conjunctions, then the next triplicity begins in the fire sign Aries, the next one in the earth sign Taurus, and the next one in the air sign Gemini. Finally, after 953 years, another great conjunction occurs in the water element, however this time not in Pisces but in

This astrological theory of history fascinated Muslim, as well as Jewish and Christian, scholars in Persia and became the subject of comprehensive treatises. Through Moorish Spain, some of these works were introduced to Europe, translated into Latin, and inspired western scholars to write treatises of similar kind. Amongst the latter are above all the English philosopher and Franciscan friar Roger Bacon (13th century) as well as the French theologian and astrologer Pierre d'Ailly (1400).

Kepler was fascinated by these theories, too. He studied the writings of Pierre d'Ailly (14th/15th cent.) and the Italian Humanist Gerolamo Cardano (16th cent.), however also acknosledged Pico de la Mirandola's (15th cent.) criticisms of astrology. Based on these studies, Kepler created his own astrological world history. Although Pico had convinced him that the astrological zodiac signs and elements were nothing but a construct of human fantasy, without any reality behind them, he still believed that the Jupiter-Saturn trigon, when it touched the vernal point, indicated an important turning point in world history.³²⁵ Consequently, he calculated the great conjunctions in the tropical zodiac and found that they occurred about every 800 years. In his book *De nova stella in pede Serpentarii* ("On the New Star in the Foot of Ophiuchus"), he derives the following historical chronology³²⁶:

1	-4000	0	Adam	Creatio mundi.
2	-3200	800	Enoch	Latrocinia, urbes, artes, tyrannia.
3	-2400	1600	Noah	Diluvium.
4	-1600	2400	Moses	Exitus ex Aegypto. Lex
5	-800	3200	Esaias	Aera Graecorum, Babyloniorum, Romanorum.
6	1	4000	Christus Dominus	Monarchia Romana. Reformatio orbis.
7	800	4800	Carolus Magnus	Imperium Occidentis et Saracenorum.
8	1600	5600	Rodolphus II	Vita, fata et vota nostra, qui haec disserimus.

Cancer. Here, each middle conjunction is assigned to a particular zodiac sign. Consequently, a great conjunction assigned *Pisces* is only repeated after 12 middle conjunctions, thus after three great conjunctions of 953 years each, or 2859 years. (Bar Chija, *Sefer Megillat ha-Megalleh* (1924), pp. 116f. (Hebrew); cf. the Latin translation by one otherwise unknown Theodoricus de Northem on pp. xxxix ff.). In reality, of course, the 953 year cycle that bar Hiyya reckons for one "mighty conjunction" is too long, even for the sidereal zodiac. His calculations seem to follow the method of his Persian and Arabic predecessors. In the tropical zodiac, a mighty conjunction lasts for either 2383 or 2443 years, in the sidereal zodiac either 2621 or 2681 years.

³²⁵ If the times were considered where the trigon touches all four equinoxes and solstices, then one would also arrive at the 200-year periods that correspond to the element trigons of the classical theory of the Jupiter-Saturn cycles. However, Kepler does not do this.

³²⁶ Kepler, *Opera omnia* II, p. 636; cf. I, p. 447; IV, p. 483ff.

1	4000 BCE	0	Adam	Creation of the world.
2	3200 BCE	800	Enoch	Raids, cities, arts, tyranny.
3	2400 BCE	1600	Noah	Deluge.
4	1600 BCE	2400	Moses	Exodus from Egypt. Law.
5	800 BCE	3200	Isaiah	Era of the Greeks, Babylonians, Romans.
6	1 CE	4000	Christ the Lord	Roman Empire. Renewal of the world.
7	800 CE	4800	Charlemagne	Empire of the West and the Saracens.
8	1600 CE	5600	Rudolf II	Life, fate, and prayers of we ourselves who discuss these things

Since a new fire cycle began in the year 1603 with a "great conjunction" in Sagittarius, Kepler believed that another major historical event was to be expected in his own epoch. This expectation, which was shared by astrologers of his time, was greatly exaggerated by the unlikely coincidence of a supernova that appeared inside the planetary cluster of Jupiter, Saturn, and Mars—a "new star" that was far brighter than all the three planets and almost as bright as Venus.³²⁷ The psychological power of this coincidence was increased even more by the fact that, as Kepler writes, astrologers had already *expected*, based on Arabic sources, that a *comet* or a *nova*³²⁸ would appear synchronously with this conjunction.³²⁹ It must be taken into account that in Kepler's time it was absolutely impossible to predict a comet or a nova. The astronomical events of that year seemed to possess an impressive metaphysical quality and exerted enormous magical influence on Kepler and his contemporaries.

Kepler himself did not dare to provide a concrete astrological prediction from this extraordinary celestial event, but he reports that many expected the Second Coming of Christ.. The new star was reminiscent of the Star of Bethlehem,

³²⁷ According to an Italian observer, the star at the time of its appearance was "not much inferior to Venus in magnitude and light, but superior to Jupiter" (*magnitudine et lumine non multo inferior Venere, superior Jove*; Kepler, *Opera omnia*, II, p. 618, footnote.) And: "as it appeared almost twice as big as its nearest neighbour, Jupiter" ("wie er dan fast zweymahl so gross geschienen, als sein nechster nachpaur Jupiter"; Kepler, *Opera omnia* I, p. 474).

³²⁸ As has been stated, the difference between comets and novae was not known yet because the nature of these phenomena was not understood.

³²⁹ Kepler, Opera omnia II, p. 617. Cf. Abū Ma'shar, Book of Religions and Dynasties, 8.1.7; Aristotle, Meteorology, I.6. For the year 1604, Albin Moller predicted a comet in his Practica Astrologica Anni 1604 (according to Moller's own claim in: Moller, Gründlicher und warer Bericht Von dem newen Cometstern, 1605, last page). Furthermore, Johannes Krabbe in his Prognosticon Astrologicum of the year 1604 and in the Newe astronomische observationes der zweyen obern Planeten: Sampt eim Bericht von der grossen Conjunction Saturni u. Iovis, 1605 (according to Krabbe's own claim in: Krabbe, Cometa, So Anno 1604. den 3. Tag Octobris, am Himmel erschienen, sampt desselben Lauff, Höhe, Grösse und Effect, 1605, in the preface). However, it must be noted that Krabbe had already predicted comets several times, so that his chance hit in 1604 was actually less astonishing. Unfortunately, some of the sources mentioned here are very difficult to get hold of.

and authors such as Ficino and Cardano, who had lived in the 15th and 16th century, had asserted that the Star of Bethlehem was a "new star" or "comet". Kepler himself tries to avoid a definite conclusion.³³⁰ However, he writes:

Was nun sein bedeuttung sein werd, ist schwärlich zu ergründen, vnd diss allein gewiss, dass er eintweder vns Menschen gar nichts, oder aber solliche hohe wüchtige ding zu bedeuten habe, die aller Menschen Sinn und vernunfft vbertreffen.³³¹

Now, what will be its significance is hard to figure out, and only this is certain: that for us humans it will indicate either nothing, or otherwise so high and forceful things that it will surpass the intelligence and understanding of all humans.

And in another place:

dicendum igitur hoc alterum, quod securissime et plena fiducia pronuncio: associatum esse novum hoc coeleste prodigium ab ipso omnipotente Deo tribus planetis, Saturno, Jovi et Marti, tunc conjunctis, certo consilio ad hominum salutem directo.

Thus, this other point must be stated that I proclaim with greatest certainty and full confidence: This new celestial omen was added by the almighty God himself to the three planets, Saturn, Jupiter, and Mars, which stood in conjunction at that time, with a firm intention that was directed towards the salvation of humankind.³³²

It is obvious that Kepler could not evade the magical power of this new star, which had just appeared during this astrologically significant conjunction and even formed part of it. Understandably, he drew the conclusion that something similar must have occurred at the time Jesus was born. He writes:

Sequebatur igitur, Christum natum esse anno uno atque altero post conjunctionem magnam trium superiorum in principio Arietis atque seu fine Piscium, a qua sextum ab orbe condito recurrebat triplicitas ignea: stellam igitur, quae Magos perduxit ad Christi praesepe, utpote biennio antiquiorem nativitate Christi, hac circumstantia nostrae huic stellae fuisse comparandam.

Thus it followed that Christ was born one year after, or in the second year after, the great conjunction of the three outer planets (= Jupiter, Saturn, and Mars, D.K.) at the beginning of Aries or the end of Pisces, which (conjunction) brought back the fire triplicity the sixth time since the creation of the world. [Also, it followed] from the fact that the star that brought the magi to the manger of Christ and was two years older than the birth of Christ, under this circumstance, was comparable to this our [present] star.³³³

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³³⁰ Kepler, Opera omnia II, pp. 746f.

³³¹ Kepler, Opera omnia I, p. 475.

³³² Kepler, *Opera omnia* II, p. 717. Kepler was less restrained *before* the appearance of the star. In a report written in 1603 and addressed to Emperor Rudolf II, he dares to make political prognoses for the next 200 years, based on the imminent "fiery trigon". The results are gloomy for the neighbouring countries, and positive only for the Holy Roman Empire (of the German Nation). (*Opera omnia* I, p. 447-449). ³³³ Kepler, *Opera omnia* IV, p. 177.

And:

Erant magi et nationis et professionis vocabulo Chaldaei, penes quos primum nata fuit astrologia, cujus disciplinae pronunciatum hoc est: conjunctiones maximas planetarum superiorum in punctis cardinalibus, praecipue aequinoctialibus Arietis et Librae, mutationem rerum universalem, et stellam cometam sub illa tempora conjunctionis apparentem ortum alicujus monarchae significare.

The magi were so-called Chaldeans by nation and profession, amongst whom astrology was first born, whose doctrine stated the following: The greatest conjunctions of the three outer planets at the cardinal points, in particular at the equinoxes of Aries and Libra, indicate a wholesale change of things, and a comet that appears at the those times of the conjunction [indicates] the birth of a monarch.³³⁴

Thus, in Kepler's opinion, the conjunction in 7 BCE indicated a new cycle of the fire triplicity, i.e. a new great astrological cycle of history. Although he himself found that all three conjunctions of the year still took place in the second half of the water sign Pisces, he assigns them to the firey sign of Aries and to the fire trigon because they occurred near the equinoctial point.

Interestingly, and in contrast to modern authors, Kepler *does not give any importance to the sign of Pisces*. As has been stated, the first one to lay stress on Pisces was Friedrich Münter. He hit on the idea when he read a book by the Spanish Jewish Bible commentator and philosopher, Don Isaac Abravanel (איני הישונא, 1437-1508). In this book titled "The Sources of Salvation" (מעיני הישועה), which, however, does not mention the Star of Bethlehem, Abravanel writes³³⁵:

והנה כשחפשנו בפעולות כל המברות הגדולות אשר היו מימות עולם מצאנו ראינו שלא היתה מחברת שעשתה באומות פועל גדול כל כך שנוי עצום בענין הגופיי והנפשיי כאשר עשתה המחברת הגדולה משבתאי וצדק בדגים שהיתה בשנת ב' לפים ושסה' לבריאת עולם בהיות ישראל במצרים ג' שנים קודם לידת מרעה

And when we investigated the effects of all great conjunctions that [have occurred] since the [first] Days of the World, we found and realised that there is no conjunction that has caused such a great and powerful transforming effect amongst the peoples, both concerning the body and the soul, as the great conjunction of Saturn and Jupiter in Pisces did, namely the one that occurred in the year 2365 of the Creation of the World (= 1397/6 BCE; D. K.), at the time when Israel was in Egypt, three years before the birth of the shepherd (i.e. Moses; D. K.).³³⁶

³³⁴ Kepler, Opera omnia IV, p. 347.

³³⁵ The Hebrew text is taken from the edition of 1551 from Ferrara. It is found in the appendix of the "12th source", p. 3. A partial German translation (actually rather a paraphrase) of the passages relevant to the present investigation is given by Münter in: *Der Stern der Weisen*, pp. 55-58.

³³⁶ Abravanel, געיני הישועה) ("The Sources of Salvation"), 127 (קכ"ז), left page (Hebrew).

A Saturn-Jupiter conjunction did indeed take place in 1397/1396 BCE. Abravanel considers it to be a "mighty conjunction" and believes that it announced the birth of Moses, which was to take place three years later, as well as the exodus of the Israelites from Egypt, which was to occur 83 years later. As has been shown already, the "mighty conjunction" had to take place in Pisces in Abravanel's view, because this is the *only zodiac sign in which both benefic planets, namely Jupiter and Venus, have an astrological dignity, Jupiter his so-called domicile, and Venus her exaltation.*³³⁷

Abravanel linked this Mosaic conjunction with the one that was to occur 2860 years later, in his own lifetime, in the year 1463/1464 CE. He believed it would be a new "mighty conjunction"³³⁸ and indicated "mighty" events that would be comparable to the appearance of Moses and the exodus from Egypt. For this reason, he expected the arrival of the Messiah very soon, even in his own lifetime. This messianic expectation had a great number of adherents in the 15th century. Since Jews suffered a lot from persecution in that time, they desperately hoped for the prompt arrival of the Messiah.

Münter believed that Abravanel's deliberations went back to an ancient tradition and that astrologers in Jesus' time already considered the conjunction in 7 BCE an extraordinary astrological event. However, Abravanel, who himself had suffered persecution by Christians and abhorred Christianity, did not even mention this conjunction and was not willing to concede an important role to Jesus in connection with the theory of the Jupiter-Saturn cycles.

Münter in his time tried without success to identify Abravanel's sources and demonstrate that there was an ancient Jewish tradition of conjunction cycle astrology. Fortunately, the availability of sources is a lot better today. Already more than 300 years before Abravanel, the Catalonian Jewish astrologer Abraham Bar Hiyya (אברהם בר חייא, 1070-1136) wrote an astrological theory of history under the title "Scroll of the Revealer" (מגלת המגלה)³³⁹, where he held almost the same views as Abravanel. He also mentions the conjunction of Jupiter and Saturn that took place in the Jewish year 2365 (= 1397/1396 BCE), he also locates it in Pisces and calls it "the great conjunction of the Kingdom of Israel" (החבור הרב למלכות ישראל), which allegedly announced the birth of Moses and the exodus of Israel from Egypt.³⁴⁰ Like Abravanel, he dates the birth of Moses three years later³⁴¹ and the exodus

³³⁷ Vide quotation above on pp. 135f.

³³⁸ Explained on p. 151, particularly footnote 324.

³³⁹ The Hebrew text was published by Poznanski and Guttmann: Bar Chija, *Sefer Megillat ha-Megalleh* (1924). To the knowledge of this author, there is no translation of this work.

³⁴⁰ Bar Chija, Sefer Megillat ha-Megalleh (1924), pp. 119ff. (Hebrew).

³⁴¹ On the 4th Adar of the Jewish year 2368, which corresponds to the 29th March 1393 BCE. (Bar Chija, op. cit., p. 121).

83 years later.³⁴² And like Abravanel, Bar Hiyya links the "mighty conjunction" of 1397 BCE in Pisces with the conjunction of 1464 CE and believes that the latter indicates the coming of the Messiah in the year 1468.³⁴³

So, is it possible that in the opinion of ancient Jews, a Jupiter-Saturn conjunction in Pisces indicated the appearance of the king of Israel or the Messiah? This must be doubted. The conjunction theory certainly did not exist at the time of the exodus. This is already obvious from the fact that Bar Hiyya's assertion that the conjunction took place in Pisces is wrong. In reality, it took place in sidereal Capricorn (or in tropical Sagittarius). Furthermore, he would have located the conjunction of 7 BCE in Aries. Bar Hiyya's whole theory is based on calculations only, using the astronomical methods that were available in his time.

Very revealing is the fact that Abraham ibn Ezra (1092-1167), a Spanish Jewish astrologer and younger contemporary of Bar Hiyya, who also wrote about Jupiter-Saturn cycles, held very different opinions than bar Hiyya:

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    (1) רק דבר מנוסה הוא שאריה ושמש לאדום ובו הייתה המחברת טרם שיולד
האיש שחושבים שהוא אלוה
    (2) ומזל דלי הוא מזל ישראל ...
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במזל עקרב לפי דברם היתה במזל עקרב (6)

(1) However, it is a reliable fact that Leo and the Sun belong to Edom, and in it (i.e. Leo; D.K.) was the conjunction that took place before the man was born who they believed was God (i.e. Jesus; D. K.).

(2) And the zodiac sign Aquarius is the sign of Israel...³⁴⁴

(6) And the conjunction which was before the prophet of the Muslims rose, was in the sign Scorpio, in their opinion.³⁴⁵

The *Liber de nativitatibus*, a Latin work on natal horoscopy which is also attributed to Ibn Ezra, states the following in the chapter on the 9th astrological house:

³⁴² Bar Chija, op. cit., p. 123.

³⁴³ However, he notes that other authors expected the Messiah 20 years earlier, because the first conjunction in the element water was actually calculated to occur in the year 1444 in Cancer. Bar Hiyya does not choose between the two opinions. (Bar Chija, op. cit., pp. 152-154)

³⁴⁴ In the subsequent passage, ibn Ezra explains that Israel, in principle, is *not* subject to a zodiac sign as long as it obeys Gods Law. However, if it deviates from the Law, then it is subject to a zodiac sign.

³⁴⁵ Ibn Ezra, *Olam II*, 14.1-6, according to Sela, *Abraham ibn Ezra*. *The Book of the World*, pp. 164f.

Sciendum etiam quod adunatio Iovis et Saturni fuit in Aquario ante exitum Iudeorum de Egypto, eorundem adunatio fuit in Leone ante Christi nativitatem, eorundem vero adunatio fuit in Scorpione ante nativitatem Machometi.

Also, one has to know that a union of Jupiter and Saturn in Aquarius occurred before the exodus of the Jews from Egypt, that a union of the same [planets] in Leo occurred before the birth of Christ, and that a union of the same [planets] occurred before the birth of Muhammad.³⁴⁶

These texts contradict Münter's theory, which goes back to Abravanel and Bar Hiyya, in two respects. Firstly, in ibn Ezra's view, the zodiac sign of Israel is not Pisces, but Aquarius, i.e. the "birth" of Israel, which is linked to the exodus and Moses, occurred at the beginning of an air triplicity.³⁴⁷ Secondly, he states that the birth of Jesus and the birth of Christianity was announced by a conjunction in Leo, namely the one in 26 BCE, as shall be seen. It turns out that the view that the Messiah had to be born under a conjunction of Jupiter and Saturn in Pisces was not generally accepted among Jewish astrologers of the Middle Ages. Ibn Ezra does not even mention this theory, so that serious doubts arise whether he was aware of it at all. Moreover, Ibn Ezra states that the conjunction theory goes back to Persian and Indian – not Jewish! – astrologers.³⁴⁸ As shall be seen shortly, the Persians taught that the great conjunction in Pisces took place in the element fire in Aries or Leo, not in Pisces. Moses Ben Maimon, another contemporary of Bar Hiyya's, while mentioning the theory of conjunction cycles, also is of the opinion that the great conjunction takes place in *Aries*, not in Pisces.³⁴⁹

Incidentally, Jesus and Mohammed were not necessarily assumed to have been born during a great conjunction, i.e. during the first conjunction of a triplicity or sign. Between the great conjunction in fire and the one in water there are three cycles of about 240 years, according to the mentioned authors, thus about 720 years. However, between Jesus and Muhammad there were only approximately 572 years. According to Bar Hiyya, the fire period into which the birth of Jesus fell began already with the conjunction in the year 206/205 BCE and ended with the one in the year 33/34 CE, which he assigns

³⁴⁶ Ibn Ezra, *Liber de Nativitatibus*, Venice, 1484 (Erhardus Ratdolt), in the chapter on the 9th astrological house.

³⁴⁷ Vide Sela's commentary, op. cit., pp. 204f.

³⁴⁸ Ibn Ezra, *Te 'amim* I (§ 10.9:1, S. 106f.); according to Sela, op. cit., p. 20.

³⁴⁹ Maimonides, "Letter to Yemen" (אגרת תימן), p. 70 (Arabic text in Hebrew script, here rendered in Arabic script):

وهذا هو القران الاعظم الكائن كل الف سنة الا اربعين سنة وهو منذ يجتمع زحل والمشترى اول دقيقة من الحمل الى ان يجتمعا ثانية

[&]quot;And this is the greatest (or mightiest) conjunction, which is in total 40 years less than 1000 years. And it is from one conjunction of Saturn and Jupiter on the first degree of Aries to the next one."

to the earth element.³⁵⁰ However, in his view, Jesus was a completely irrelevant person.³⁵¹ Ibn Ezra, however, seems to follow Māšā'allāh's theory, which will be discussed shortly.

Thus, the oldest extant source that considers great conjunctions in Pisces of paramount importance is the work of Bar Hiyya. Strobel points out, however, that Jewish scholars who lived in the Near East in 900 CE, such as Saadia Gaon, Salmon ben Yeroham and others, predicted the coming of the Messiah based on the prophecies of Daniel for the year 968. Also, in the same year, a conjunction of Jupiter and Saturn, even a triple one, was to occur in Pisces.³⁵² Furthermore, it is interesting that Saadia polemicises against those who try to predict world history and the Messiah's coming using planetary conjunctions.³⁵³ It is not clear whom exactly he is referring to, but it is obvious that conjunction theories were current among Jews in his time. However, upon closer inspection, this turns out to be a wrong track. The conjunction in 967/968, which occurred in the boundary area of the constellations Pisces and Aries, was not placed by them in Pisces, but in Aries. It must be noted that conjunction theories did not base their calculations on the real constellations, but on the mathematical zodiac of equal signs of exactly 30° each. In this zodiac, the conjunction of 967/968 fell clearly into Aries. Bar Hivya even had the fire element begin already with the conjunction in the year 749, and he believed that the one in 968 was the last one in fire before the beginning of the earth period.³⁵⁴ Thus, when looking for support in an alleged older tradition of bar Hiyya, the conjunction of 968 cannot be attributed to the sign Pisces. Saadia Gaon and Salmon ben Yeroham would have attributed the conjunction of 968 to Aries, too.

Messianic hopes were also stirred up by a conjunction that took place in November 1186. This one was truly extraordinary because on 14 and 15 September of the same year, not only Jupiter and Saturn, but all five planets, the Sun, and the Moon assembled within only a few degrees in the same zodiac sign, namely, depending on the choice of zodiac, either in the air sign *Libra* (tropical) or in the earth sign *Virgo* (sidereal).³⁵⁵ From the correspondence between the Jewish scholar Moses ben Maimon and Jacob

³⁵⁰ In his view, the air period starts in 272/273 CE, the water period in 510/511 CE (Bar Chija, *Megillat ha-Megalleh* (1924), pp. 134-139, Hebrew.)

³⁵¹ op. cit., p. 136. Quoted below on p. 170.

³⁵² Strobel, "Weltenjahr, Große Konjunktion und Messiasstern", pp. 1150ff.

³⁵³ Ben-Shammai, "Saadia's Introduction to Daniel: ...", pp. 54-56 und 72-74.

³⁵⁴ bar Chija, op. cit., p. 141.

³⁵⁵ Baer, F., "Eine jüdische Messiasprophetie auf das Jahr 1186 und der dritte Kreuzzug", particularly pp. 158f. The idea of apocalyptic super conjunctions goes back to the Babylonian-Greek astrologer Berossus (4th/ 3rd century BCE; vide Seneca, *Quaestiones naturales* III,29), as well as the astronomical theories of Indians and Persians (Sūryasiddhānta, Āryabhața).

ibn al-Fayyūmi, the chief of the Yemenite Jews, it is known that Yemenite astrologers considered this super-conjunction extremely important.³⁵⁶

The oldest extant source that links the birth of Jesus with a Jupiter-Saturn conjunction is the Jewish astrologer and Muslim convert Masha'allah (Māšā'allāh Ibn-Aṯarī), who lived around 800 CE in Basrah in southern Iraq.³⁵⁷ In his opinion also, the conjunction of Jesus was not the one in 7 BCE in Pisces, but *the one in 26 BCE in the sign of Leo*, which astrologically has to do with kingship and rulership. Furthermore, according to him, this was not the first conjunction in the element fire, but already the ninth.³⁵⁸ Masha'allah's "Book on the Conjunctions, Religions, and Nations" (الالايات والاديات والاديات) is unfortunately lost. However, the Christian astrologer Ibn Hibintā, who lived in the 9th century in Baghdad and wrote in Arabic, fortunately provides a paraphrase of its most important passages. In his "Comprehensive Book on Astrology" (المغنى في الحكام النجوم), he writes:

ونسق ماشاالله القرانات بعد ذلك في مثلثة مثلثة الى ان بلغ الى المثلثة النارية التي كان ولد المسيح عليه السلام في القران التاسع منها و هي مثلثة الاسد

... and Masha'allah listed the conjunctions, triplicity by triplicity, until he arrived at the fiery triplicity in which the Christ – peace on him – was born,, in the ninth conjunction thereof, and it was the triplicity of Leo.³⁵⁹

³⁵⁶ Maimonides, "Letter to Yemen" (אגרת תימן), p. 72 (Arabic text in Hebrew script, here rendered in Arabic script):

وكذلك قولك ان اقوام قووموا القران المستانف فوجدوا السبعة الكواكب كلها تجتمع في برج واحد. هو قول غير صحيح الذي قال لك هذا. وليس ثم قران سباعي بوجه لا في القران المستانف ولا في ن' قران تأتى بعده. ... وانما هذا كلام رجل جاهل بالتقاويم كما وصفت من جهلة انه قال يقع طوفان من هوا وتراب.

"And you are saying that people have calculated the upcoming conjunction and found that all seven planets would be united in one single zodiac sign. This assertion is not correct which that [person] told you. There will be no sevenfold conjunction then, either during the upcoming conjunction nor in 50 subsequent conjunctions. ... But this is the assertion of a foolish man according to the information that you are giving about the foolishness which he says that a deluge of air and earth will occur."

Air and earth are the elements of the two signs Virgo and Libra, near whose boundary the conjunction was going to take place. However, in his anti-astrology fervour, Ben Maimon makes an erroneous assertion, since the "sevenfold conjunction" did actually take place. On the 15th September 1186, the five planets, the Sun, and the Moon spanned only 13°, which obviously can be called a "sevenfold" conjunction.

³⁵⁷ For this and the following facts, see Kennedy & Pingree, *The Astrological History* of Māshā'allāh.

³⁵⁸ Roberts is in error when asserting that this was the *first* fiery conjunction in Masha'allah's system. (*The Star of the Magi*, p. 145)

³⁵⁹ Arabic text D. K. according to the facsimile reproduction of a manuscript in: Kennedy & Pingree, *The Astrological History of Māshā'allāh*, 227v10-12, p. 6. Their translation reads: "... and Māshā'allāh arranged the conjunctions after that,

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And a bit later, he states:

القران التاسع التي ولد المسيح في السنة الثالثة عشر منه في احدى عشر درجة وعشرين دقيقة من الاسد

The 9th conjunction, in whose 13th year the Christ was born, was at 11 degrees and 20 minutes in Leo...³⁶⁰

Thus, in Masha'allah's system, the conjunction of Jesus was actually the one in 26 BCE, and it was not the first one in the fire trigon, but the *ninth*, the first one having taken place in 184 BCE in Aries. Moreover, Jesus was allegedly born 13 years after the Leo conjunction, thus in the year 13 BCE.

Obviously, this is not authentic historical information, but is based on flawed backward calculations. In reality, the conjunction of 184 BCE did not occur in the beginning of Aries, but *in the beginning of Pisces*, even if Masha'allah's zodiac³⁶¹ is used. How can this gross error be explained? On the one hand from the fact that Masha'allah determines the beginnings of the element cycles schematically based on the mean velocities of the planets and the mean conjunctions that result from them, *not* based on the true zodiacal positions where the conjunctions took place. On the other, Masha'allah commits a systematic error of 10° and, consequently, assumes the beginning of the fiery cycle four conjunction in 26 BCE is *the fifth* in the element of fire. As has been stated, this calculation is based on mean planetary motions³⁶³ and Masha'allah's sidereal zodiac, where the initial point of Aries was marked by the fixed star ζ *Piscium*.

Now, if the *magi* of Matthew had made similar calculations, then they would no doubt have used the Babylonian zodiac, in which the stars Aldebaran and Antares were located at 15° of Taurus and Scorpio. The conjunction in 26 BCE would then probably have been the second or third in the fire triplicity. Even if one uses *true* planetary positions, the conjunction on 29 June 26 BCE

triplicity by triplicity, until he arrived at the fiery triplicity in which was the birth of the Anointed (Christ), upon Him peace, in the ninth conjunction of them, it being the triplicity of Leo..." (p. 44).

³⁶⁰ Ibidem, 228v1-3, p. 8. The translation given by Kennedy/Pingree reads: "The ninth conjunction, in the thirteenth year of which the Christ was born, was in eleven degrees and twenty minutes of Leo..." (p. 45).

³⁶¹ Masha'allah used the sidereal zodiac of his planetary tables, the $Z\bar{i}j$ al-sh $\bar{a}h$, which derived from the Indian astronomical textbook S \bar{u} ryasiddh \bar{a} nta. In this work, the star ζ Piscium marks the initial point of the zodiac.

³⁶² Vide Kennedy/Pingree, The Astrological History of Māshā'allāh, pp. 69-88.

³⁶³ If the calculations were done with true positions, but still with Masha'allahs sidereal zodiac, it turns out that the conjunction on 11 August 86 BCE already occurred in the fiery sign Leo and the conjunction on 6 December 105 BCE took place near the sign boundary of Sagittarius. would clearly have taken place in Leo, being the third one in the fire triplicity. Only if the tropical zodiac is used would the conjunction that took place in 26 BCE at 3° in Leo be the first one in the fire trigon. However, the *magi* would most probably have used a sidereal zodiac.

Be that as it may, Masha'allah links Jesus with the fire trigon and the royal sign of Leo, not with Pisces. Moreover, as a Muslim, he does not assume that Jesus had to be born exactly in the year of a great conjunction.

In this context, Courtney Roberts also refers to the Muslim astrologer *Omar Tiberiades* (*'Umar ibn al-Farruhān al-Ṭabarī*), a contemporary of Masha-'allah, in order to prove that the beginning of the fire triplicity was considered extremely important:

'Umar says that once the Jupiter-Saturn conjunctions ... had moved back into the fire signs, the first conjunction in the royal sign Leo was the most significant of the entire millennial cycle. It set the tone or pattern for all the changes and developments that would eventually unfold through the ensuing cycle of middle and small conjunctions, as the new millennium unfurled....³⁶⁴

Omar himself writes about it:

The indication of the first ' $\bar{a}m$ is taken from the returns (' $awd\bar{a}t$) ... of the conjunctions of the thousands, I mean the conjunction of the two planets, Saturn and Jupiter in Leo, to their return to that place: this is a period ($zam\bar{a}n$) of 959 years. This point of time (waqt) indicates the sum of what happens in this period ($zam\bar{a}n$). At this point of time, there is a shift from one condition to another, a change in genera and shapes ($a\bar{s}b\bar{a}h$), and new matters, the like of which has never occurred before. No indication is like its indication, no period like its period, and there is no doubt about the change...³⁶⁵

Unfortunately, this passage does not say which conjunction in Leo exactly Omar has in mind or what historical events he correlated with it. Jesus is not even mentioned, at least not in this passage from his unfortunately unpublished work. As a Muslim, he may not be thinking of Jesus here, rather of the fact that *in his own epoch*, a great conjunction took place, namely on 4 June 829 at the beginning of Leo.

Another important work on historical astrology was written by the Muslim astrologer *Abu Ma'shar*, who lived a bit later than Omar and Masha'allah, however still in the 9th century in Baghdad. His "Book of Religions and Dynasties" (کتاب الملل و الدول) was translated into Latin in the 12th or 13th century and thereby became accessible to western scholars. Abu Ma'shar does not mention Jesus in connection with Jupiter-Saturn cycles.³⁶⁶ However, in

³⁶⁴ Roberts, op. cit., p. 141.

³⁶⁵ Omar Tiberiades, in Yamamoto/Burnett, *Abū Ma'šar on Historical Astrology*, vol. 1, pp. 585f. The complete book of Omar under the title *Kitāb al-qirānāt wa-taḥwīl as-sinīn* (کتاب القرانات وتحویل السنین) is unfortunately not published.

³⁶⁶ Pingree mentions a manuscript which contains a table of important historical events since the deluge in 3102 BCE (-3101), among which is included the birth of

a short Latin commentary that makes reference to Book 1, chapter 26, which treats the Jupiter-Saturn cycles between the creation of Adam, the deluge, and the birth of Muhammad, the following statement is made:

Anno 3362 fuit coniunctio Saturni et Iovis in 4 gradu Leonis in fine Iunii et mutatio triplicitatis aquatice ad igneam; sub hac natus est Christus anno 3388 scilicet sub coniunctione proxima precedente que fuit Saturni et Iovis in Ariete 6° anno precedente scilicet anno 3382.

In the year 3362 (since the deluge, i.e. in the year 26 BCE), there was a conjunction of Saturn and Jupiter on the 4th degree of Leo at the end of June, and a transition from the watery triplicity to the fiery one. Under this [fiery triplicity], Christ was born in the year 3388 (1 CE), namely under the subsequent conjunction of Saturn and Jupiter that preceded [his birth, taking place] at 6° Aries in the year 3382 (6 BCE).³⁶⁷

It is interesting that this text, which must have been written some time between the 12th and the 15th century, is of the opinion that the ingress of the cycle into the element fire occurred in the year 26 BCE.³⁶⁸ In addition, it mentions that Jesus was born after the conjunction in 7/6 BCE, however assigns it to Aries, not Pisces.

When Christian authors took over the theory of the great conjunctions from Jews and Muslims, it was only natural that they tried to reinterpret it in such a way as to make the birth of Jesus fall near a great conjunction. Here, a Latin poem titled *De vetula* ("On the Old Woman"), which was ascribed to the Roman poet Ovid, but most probably was composed by the 13th century French philosopher *Richard de Fournival*, played an important role. His motive for this literary forgery is unknown. However, the text became widespread and was considered authentic. It states that the conjunction in 7/6 BCE occurred near the vernal equinoctial point in the fire sign Aries and during the hour when the first decan (i.e. the first third) of Virgo rose at the eastern horizon. This allegedly indicated that an important prophet and founder of a religion would be born.³⁶⁹

Jesus on the 25th December 9 BCE (-8). (Pingree, *The Thousands of Abū Ma'shar*, p. 34, footnote 1) However, even if this table had been created by Abu Ma'shar himself, it would not seem to have anything to do with Jupiter-Saturn conjunctions. Strobel's assertion that the table makes reference to the Jupiter-Saturn conjunction in 7 BCE is quite bold.

³⁶⁷ Yamamoto/Burnett, Abū Ma 'šar on Historical Astrology, vol. 2, p. 350.

 $^{^{368}}$ He does not realise that a conjunction at 6° Aries and another one at 4° Leo would have been preceded by a conjunction at 1° or 2° Sagittarius, thus also in the element fire, and that for this reason the first fiery conjunction would have taken place in the year 46 BCE.

³⁶⁹ Pseudo-Ovid, *De Vetula*, Book III(35),611ff.:

⁽⁶¹¹⁾ Una quidem talis (maior coniunctio) felici tempore nuper Cesaris Augusti fuit anno bis duodeno

The English philosopher and astrologer Roger Bacon (1214-1294) made reference to this text, and he believed that the birth of Jesus was linked to the conjunction in 7 BCE. However, Bacon was aware that this conjunction actually took place in Pisces, not in Aries, and he stated that the conjunction

a regni novitate sui. Que significavit post annum sextum, nasci debere prophetam absque maris coitu de virgine. Cuius habetur typus, ubi plus Mercurii vis multiplicatur, cuius erit concors complexio primo future secte, nam nusquam de signis sic dominatur Mercurius sicut in signo virginis; illic est eius domus, exaltatio, triplicitasque per totum signum nec non et terminus eius in primis septem gradibus. Dictique prophete typus habetur ibi, quamvis sub enigmate; namque ... dicitur ex veterum scriptis ascendere prima virginis in facie; prolixi virgo capilli ... sede sedet strata, puerum nutrit puero ius ad comedendum dans. Puerumque Iesum vocat ipsum gens quaedam ... (636) Hec autem celi pars ascendebat in hora,

qua cum Saturno Iovis est coniunctio facta nuper significans sectam, quia triplicitatem mutavere suam nec non etiam prope punctum veris, ubi fieri coniunctio maxima posset, principio signi propior si forte fuisset. Tunc et erant anni Grecorum quinque trecenti atque novem menses cum ter sex pene diebus.

"Such a [greater conjunction] occurred recently in the prosperous time of Emperor Augustus, in the 24th year from the beginning of his reign. It indicated that after the 6th year a prophet would be born from a virgin without her having united with a man. His type appears in the [zodiac sign of Virgo], where the force of Mercury is multiplied, whose character best accords with the future religion. For nowhere else in the zodiac signs does Mercury dominate as much as in Virgo. In this [sign] are his *domicile*, his *exaltation*, and his *triplicity*, through the whole sign, and in addition his *boundary* is in the first seven degrees. And here (: in this sign) appears the type of the mentioned prophet, although in the form of an enigma, for ... according to the writings of the ancients, in the first decan of Virgo rises [the image of a] virgin with flowing hair... She is sitting on a cushioned chair and breastfeeds a boy, and she gives the boy the right to eat. And some people call the boy Jesus. ... This part of the sky rose during the hour in which the conjunction of Jupiter with Saturn recently occurred, which indicated a [new] religion, because [the two planets] changed their triplicity and because [it occurred] near the vernal point. For there the greatest conjunction could allegedly occur if it was very close to the beginning of the sign [of Aries]. And the years of the Greeks at that time were 305 (= 7/6 BCE, D. K.) and nine months and about 18 days."

The image in the first decan of Virgo is inspired by some passage in Abū Ma'shar that goes back to Teucer of Babylon. It will be discussed later on pp. 208ff.

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was in Aries only if the mean motions of the planets were considered, not the true ones. Nevertheless, Bacon considers it to be the first conjunction in the element of fire. The conjunction in 26 BCE he assigns to the sign of Cancer and the element water.³⁷⁰

A similar view is maintained by the French theologian and astrologer Pierre d'Ailly (1350-1420) in an essay titled "Elucidation of the Astronomical Concord with the Theological and Historical Truth" (*Elucidarium astronomice concordie cum theologica et historica veritate*). Like Bacon, he finds that the conjunction in 7 (6) BCE falls in Aries only if mean motions of the planets are considered.³⁷¹ He even points out that the first conjunction that

* Persian astrologers considered Christianity to be a Mercurian religion, most probably because Christianity understands itself as "evangel, gospel", i.e. as "good news", which fits the astrological significance of Mercury, who is known as "the divine messenger". In addition, Mercury has both his astrological *domicile* and his *exaltation* in Virgo. (cf. *De Vetula*, quoted above. Vide also Strobel, "Weltenjahr, Große Konjunktion und Messiasstern", pp. 1148 ff.)

³⁷¹ d'Ailly, *Elucidarium astronomice concordie cum theologica et historica veritate*, chap. 11. Cf. chap. 25f. The passage in chap. 11 reads:

Sed hic occurrunt alique magne coniunctiones que licet non fuerint in ariete: tamen merito debent specialiter designari: quia sub eis certe magne mutationes facte sunt et notabiles effectus quos predicte coniunctiones diu antea precesserunt. ... Alia fuit circiter per 26 annos ante nativitatem christi et fuit in signo cancri de qua dixi in

³⁷⁰ Bacon, Opus majus, vol. 1, pp. 263-265. The text reads:

Et una major vel fere maxima fuit xxiv anno Augusti Caesaris, quam dixerunt sapientes astronomi significare super legem Mercurialem futuram. ... Et prima facies Virginis ascendebat in oriente, quando conjunctio illa facta fuit. Et fuit conjunctio illa prope caput Arietis. Si enim revolvamus motus Saturni et Jovis ad tempus illud, inveniemus eos fuisse conjunctos per medios cursus suos ante nativitatem Christi per sex annos, quinque dies et tres horas; et erat medius cursus utriusque in Ariete ... ii gradus, xiv minuta, xlii secunda. Cum ergo differentia inter duas conjunctiones per cursus medios addat viii signa, ii gradus, xxv minuta xvii secunda, sequitur quod praecedens conjunctio fuerat in Cancro xxix gradibus, li minutis, xxv secundis, et ita mutata fuit triplicitas a signo aquatico ad igneum.

[&]quot;And a greater and even greatest [conjunction] was in the 24th year of Emperor Augustus, which according to wise astronomers gave signs concerning the future Mercurial Law (*lex Mercurialis*, i.e. the coming of the Christian religion)*. ... And the first face (i.e. the first decan) of Virgo rose in the east, when this conjunction occurred. And the conjunction was near the beginning of Aries. For when we turn back the motions of Saturn and Jupiter to that time, we shall find that according to their mean courses, they were conjunct six years, five days and three hours before the birth of Christ; and the mean course of both of them was in Aries ... at 2 degrees 14 minutes 42 seconds. Thus since the difference between two conjunctions according to the mean courses adds up to 8 signs 2 degrees 25 minutes 17 seconds, if follows that the preceding conjunction was in Cancer at 29 degrees 51 minutes 25 seconds, and thus the triplicity has moved from a watery sign into a fiery one."

actually occurred at the beginning of Aries was the one in 53 CE.³⁷² Nevertheless, he decides to use mean motions and considers the conjunction of 7 (6) BCE the one that is historically relevant, marking the beginning of a new fire cycle and the birth of Christianity. Then he divides the history of the world into cycles of 960 years each, i.e. great conjunctions, assuming the birth of Jesus shortly after the beginning of the 6th cycle.³⁷³

Thus, d'Ailly also believes that a "great conjunction" must ideally occur at the beginning of Aries, not Pisces. He does *not* hit on the idea that Jesus could have a connection with Pisces. Although he had read Bar Hiyya's book and was aware that the latter considered conjunctions in Pisces most relevant for Israel, the idea of linking Jesus with Pisces seemed to be foreign to him.³⁷⁴

As regards the conjunction in 26 BCE, which the Persians and Arabs had located in Leo and brought in connection with Jesus, d'Ailly is of the opinion that it took place near the end of Cancer. Consequently, it would actu-

verbo quinto tractatus predicti: videtur tamen secundum aliquos quod magis notanda esset illa que fuerit ante christum fere per 6 annos in principio arietis: et hec significavit super legem mercurialem futuram secundum aliquos astronomos: hec autem sola posita est secundum medios motus dictorum planetarum. Cetere vero hic annotate dicuntur a peritis astronomis fuisse diligenter verificate et adequate ex radicibus verorum motuum secundum tabulas alfonsi. Alia fuit anno incarnationis christi 571 incompleto et fuit in 5 gradu scorpionis: venere existente in 1 gradu eiusdem signi: et hec secundum omnes significavit sectam machometi que sequebatur postea per 50 annos fere videlicet anno christi 661 (sic!) fere ...

"However, here occur some great conjunctions, which, although they were not in Aries, still deserve to be mentioned specially because certain great changes have occurred under them and remarkable effects, which the aforesaid conjunctions had preceded a lot earlier. ... Another [conjunction] was about 26 years before the birth of Christ and was in the sign of Cancer, which I have treated in the 5th discourse of the said tractate. According to some [authors], however, it seems that the one that was about 6 years before Christ in the beginning of Aries was more remarkable. And according to some astronomers, this one indicates the future Mercurian Law (lex mercurialis, i.e. the birth of the Christian religion)* However, it is located [in Aries] only according to the mean[, not the true] motions of the said planets. However, the other [conjunctions] mentioned here were allegedly carefully verified and adjusted by experienced astronomers, based on the true motions [of the planets] according to the Alfonsine Tables. Another [conjunction] was before the end of the year of the incarnation of Christ 571 (i.e. 571 CE) and was at 5° Scorpio, while Venus was at 1° of the same sign. And according to all (i.e. all authors who wrote on the conjunction theory), this [conjunction] indicated the sect of Muhammad, which followed 50 years after it, namely approximately in the year 661 (sic!) ...".

* Vide above, explanation at the end of the quotation from Roger Bacon.

³⁷² d'Ailly, op. cit., chap. 12; 17; 25.

³⁷³ d'Ailly, op. cit., chap. 26.

³⁷⁴ d'Ailly, op. cit., chap. 30f.

ally have to lose its symbolic connection with kingdom and leadership, thus with the Messiah. Still, d'Ailly considers it a boundary case and reckons it in Leo because the then fire trigon allegedly had to begin with Leo. This could perhaps be explained from the fact that the "middle conjunctions" in this system had to wander from sign to sign successively, namely from Cancer to Leo, and then to Virgo and to Scorpio. Nevertheless, d' Ailly is of the opinion that only the second conjunction of this fire cycle, i.e. the one in 7 (6) BCE is the "great conjunction". In any case, it is obvious that he wants the birth of Jesus to take place at the beginning of the Christian era and thus after the conjunction in 7 (6) BCE.³⁷⁵ Also, it has become clear how important it was to d'Ailly and *all* his contemporaries and predecessors to associate Jesus with the beginning of the *fiery* triplicity.

Now, this is already very close to Kepler's view, who also believed that the triple conjunction in 7 BCE was the *beginning* of a fiery cycle, although, strictly speaking, it occurred in the watery sign of Pisces. Like d'Ailly, he believed that Jesus was born at the beginning of the *sixth* great cycle since the creation of the world, assuming that all of these cycles began with a return of the fire triplicity. However, Kepler's argumentation is slightly different. In his view, the conjunction in 7 BCE was the first one of the new cycle because it occurred near the equinoctial point, and he abandons the

³⁷⁵ d'Ailly, op. cit., chap. 32. The text reads:

^{...} expedit ab eadem radice sumere computationis exordium que fuit circiter per 5 annos ante christum et fuit secunda coniunctio in triplicitate illa ignea sicut aliqui probant ex hoc quod per 25 annos et 268 dies ante nativitatem christi fuit una media coniunctio saturni et iovis in 30 gradu cancri vel primo leonis. ... Et sic patet quod cum illa coniunctio fuerit in fine cancri erit attribuenda principio leonis ubi incipit triplicitas ignea. Et per consequens illa coniunctio sequens fuit secunda in illa triplicitate ignea. Et licet ista secunda fuerit coniunctio maxima tamen precedens merito notanda fuit tamquam una de maioribus quia in ea incepit illa triplicitas unde concludo quod a qualibet istarum coniunctionum potest capi radix computationis aliarum coniunctionum precedentium et sequentium tamen precisius ab illa prima in qua incepit triplicitas ignea.

[&]quot;... it is useful to assume the beginning of the calculation at the same root [conjunction] that took place about five years before Christ. And it was the second conjunction in that fiery triplicity, which is proved by some from the fact that 25 years and 268 days before the birth of Christ a middle conjunction of Saturn and Jupiter occurred at 30° Cancer or 1° Leo. ... And thus it is clear that the said conjunction, although it took place in the end of Cancer, must be attributed to Leo, where the fiery triplicity begins. And consequently, that subsequent conjunction was the second one in this fiery triplicity. And although that second conjunction was a greatest conjunction, the preceding one still deserves to be considered one of the greater because the triplicity began in it. From this, I conclude that the initial point can be taken from each of the two for the calculation of the other, preceding or subsequent, conjunctions, however with greater precision from that first one, in which the fiery triplicity began."

conjunction of 26 BCE in Leo completely. In addition, he brings into play the participation of Mars in the conjunction, in particular also the conjunctions of Mars with Jupiter and Saturn, in order to move the whole process of the conjunction closer to the vernal point.³⁷⁶

Returning to the Muslim Abū Ma'shar again, interestingly, he does not mention Jesus in the context of the Jupiter-Saturn cycles, but in connection with another cycle that corresponds to 10 sidereal periods of Saturn or 295 years. The text reads:

وقد ذكر صنف منهم آخرون أنّ قدر أزمان لبث الدولة فى كلّ ملّة من الملل يكون على قدر كمّية عشرة أدوار زحلية ... وقد تعرض عند استكماله عشر دورات من دوراته أحوال وتغايير كثير من ظهور النبوّة وانتقال الدول والملل والسير على حسب ما سنصف ليكون معتبرا به فى الأزمان المستأنفة وهو أنّه لمّا استكملت لزحل عشر دورات فى أيّام دارا بن دارا دورات كان ظهور الإسكندر بن فليش إلينا وذهاب دولة الفرس ولمّا استكملت له عشر دورات آخر من دوراته ظهر اردشير بن بابكان فردّ دولة الفرس وقوّم أمور هم فلمّا استكملت له عشر دورات آخر من دوراته ظهر عيسى بن مريم عليه السلام بتغايير الملّة ولمّا استكملت له عشر دورات آخر من دوراته أهر ماني وأتا بدين ما بين المجوسية والنصرانية ولمّا استكملت له عشر دورات آخر من دوراته ألهر ماني وأتا أتى النبيّ عليه السلام بدين الإسلام

³⁷⁶ Quod medios motus attinet, Saturnus et Jupiter anno Juliano 40. fuerunt conjuncti solis 34' ante principium Arietis die 22. Januarii. Statim die 25. Febr. accessit media conjunctio Saturni et Martis in 3° Υ ; et conjunctio Jovis et Martis die 1. Martii in 5° Υ . Motus autem apparentes sic se habuere. Anno Juliano 39. circa 22. Junii, Sole in 27° II versante, fuit conjunctio Saturni et Jovis in 23° H: quorum uterque paulo post factus est stationarius, ita ut non multum Jupiter a Saturno separaretur. Qui postquam cursum et ipse in anteriora vertit, statim Augusto sequente Saturnum motu retrogrado rursum fuit nactus circa 21° H; procurrensque in anteriora usque in Novembrem, tandem Decembri tertio Saturnum occupavit in 17° H. Quos Mars anno 40. Februario et Martio consecutus, illum in Fine Piscium, hunc in principio Arietis, implevit conjunctionem.

[&]quot;As regards the mean motions, Saturn and Jupiter were in conjunction 34 arc minutes before the beginning of Aries on the 22^{nd} of January in the Julian year 40 (= 6 BCE; D.K.). Shortly thereafter, on the 25^{th} of February, the mean conjunction of Saturn and Mars followed at 3° Aries, and on the 1st of March, the conjunction of Jupiter and Mars at 5° Aries. However, the visible motions were as follows: In the Julian year 39 (= 7 BCE; D.K.) around the 22^{nd} of June, while the Sun was located at 27° Gemini, there was a conjunction of Saturn and Jupiter at 23° Pisces. Both of them became stationary shortly thereafter, Jupiter not being far from Saturn. And after the former (i.e. Jupiter) had also reverted his course into the preceding [degrees], he again encountered Saturn in the following August in retrograde motion at about 21° Pisces; and having moved backward into the preceding [degrees] until November [and become stationary again], he finally reached Saturn the third time in December at 17° Pisces. Mars finally completed the conjunction when in February and March of the 40th year (= 6 BCE), he caught up with the two, the former in the end of Pisces and the latter at the beginning of Aries" (Kepler, *Opera omnia* II, p. 708)

And one group of them (: i.e. of the older Persian astrologers) reports that the measure of the times of the existence of a dynasty in each religion corresponds to the measure of ten cycles of Saturn...

At the completion of ten of its (: Saturn's) cycles, conditions and changes might often appear, such as the appearance of prophecy and the shift of dynasties and religious communities and ways of life, as shall be shown. To give an example for it in times that [cyclically] recur: When ten cycles of Saturn were completed in the days of Darius, the son of Darius, then Alexander, the son of Philip, appeared among us, and the dynasty of the Persians went down. And when ten more of its (: Saturn's) cycles were completed, then Ardašīr, the son of Bābikān appeared and brought back the dynasty of the Persians and re-established their things. And when ten more of its cycles were completed, then Jesus appeared, the son of Mary – peace on him –, together with a change of religion. And when ten more of its cycles were completed, then Mani appeared and brought the religion that is between Zoroastrianism and Christianity. And when ten more of its cycles were completed, then the prophet – peace on him – brought the religion of Islam.³⁷⁷

It is not important whether this theory works out historically. Abu Ma'shar is aware that his scheme is not very accurate. More important is the fact that the cycles of Jupiter-Saturn conjunctions were not the only astrological method that was used to interpret historical events and changes such as the rise of new religions and Christianity. In the context of astrological theories of history, it is not necessarily correct to exclusively focus on Jupiter-Saturn conjunctions and ignore everything else.

There have been more theories about Jesus and Jupiter-Saturn conjunctions. Abraham bar Hiyya (11th cent.) does not mention the conjunctions in 26 and 7 BCE. In his view, the fire triplicity began with the conjunction in 205 BCE and the earth triplicity with the conjunction in 34 CE. He mentions Jesus only in the context of the latter. He relates that certain astrologers assumed the *crucifixion of Jesus and the birth of Christianity* in the year before this conjunction, i.e. in 33 CE. Bar Hiyya is of the opinion that it took place at the end of Leo, however attributes it to Virgo and considers it to be the beginning of an earth triplicity. He writes:

ואמרו שבשנת ג׳ אלפים תשצ״ג לעולם שהיא שנה אחת לפני הדבוק הזה נתלה ישו בן פנדירא שחיק עצמות ולשנה אחריו יצאו תלמידיו הפריצים הרעים להטעות את העולם. ואין אתה מוצא בדבוק הזה ולא בדבוק אשר לפניו אות ללידת ישו התלוי הזה מפני שהיה שפל ומאום בעיני עמו ולא היתה לו גדולה בעולם כל ימי חייו אבל אלו הרשעים תלמידיו החיו את זכרו אחרי מותו

³⁷⁷ Abū Ma'šar, *Book of Religions and Dynasties*, 2.8.33 and 34 (Yamamoto/ Burnett, *Abū Ma'šar on Historical Astrology*, vol. 1, pp. 150ff.). This theory is also referred to by Pierre d'Ailly around 1400 in his book *De concordantia astronomie veritatis et narrationis historice*, chap. xlvii.

And they say that in the year of the world 3793 (= 32/33 CE; D. K.), i.e. one year before this conjunction (which took place in 34 CE; D. K.), Jesus ben Pandira³⁷⁸ – may his bones be crunched – was crucified. And in the following year his evil immoral disciples set out to lead the world astray. And you will not find, neither with this conjunction (in Leo in the Jewish year 3794 =33/34 CE; D. K.) nor with the preceding conjunction (the one in 26 BCE in Leo; D. K.), that there was an omen for the birth of this Jesus, who was crucified. For he was low and a blemish in the eyes of his people and he had no greatness in the world all days of his life. However, these wicked godless [people], his disciples, revived his memory after his death.³⁷⁹

Like Bar Hiyya, Abravanel mentions Jesus only in the context of this conjunction that took place in the year after his crucifixion. However, his explanations are not that disrespectful:

ואחר רלח" שנה שנת ג" אלפים ותשצד" לבריאה היתה מחברת גדולה במזל בתולה השביעית לדגים והגדילה מלכות רומי ופשטה אותו בכל גלילות הארץ ומשלה בכיפת העולם בתחלת המחברת הזאת מת ישוע הנצרי ונתחדשה דתו אחר מיתתו בידי הרומיים ובארצה באופן שהיתה דתו מצרכים לממשלת רומיים ולא הורה על לידתו רק על מיתתו ולכן הגדיל אותו ודתו במותו אך לא בחייו ותקרא מחברת הרומיים

And after 238 years, in the year 3794 (33/34 CE.; D. K.) of creation, there was a great conjunction in the zodiac sign Virgo, the seventh since [the one in] Pisces (thus since the one of Moses; D.K.). And it made the empire of the Romans great, and it expanded them (: the Romans) over all regions of the earth and [like this] it ruled over the vault of the world. At the beginning of this conjunction, Jesus of Nazareth died, and his religion was renewed after his death by the hand of the Romans and by the mob, in such a way that his religion was an accessory of the rule of the Romans. And it³⁸⁰ does not indicate his birth, but his death, and thus it makes him and his religion great through his death, not through his life. And it is called the "conjunction of the Romans".³⁸¹

³⁷⁸ I.e. "Jesus, the son of Panthera". Panthera was a frequent name of Roman soldiers. Bar Hiyya is referring to the so-called Panthera legend, which according to Origen was mentioned by the Greek Philosopher Celsus (2nd cent.; Contra Celsum, 1,28-38). This legend surmises that Mary, while already betrothed to Joseph, was seduced by a Roman soldier named Panthera and became pregnant. It was also asserted that Greek parthenos (παρθένος), "virgin", was actually an anagram of the name Panthera. Thus, the misbegotten "son of Panthera" would have been scornfully changed into "son of a virgin". Of course, this only works in Greek, not in Aramaic, the language of Jesus. This legend need not be true, of course. These kinds of imputations were to be expected from enemies of Christianity.

³⁷⁹ Bar Chija, Megillat ha-Megalleh (1924), p. 136 (Hebrew; D.K.)

³⁸⁰ Probably the conjunction (מחברת). However, the verbs הגדיל are in masculine form and actually do not fit מחברת.

³⁸¹ Abravanel, קכ״ט), left page ("The Sources of Salvation"), 129 (קכ״ט), left page (Hebrew; translation given here by D. K.)

What is interesting for the present investigation is the fact that Bar Hiyya already mentions people *who associated the death rather than the birth of Jesus with a great conjunction*. This is not unreasonable since Christianity in its present form actually began with and was built up around the death of Jesus.

From all this, the following points become evident:

- The cyclical theory of history as known from Persian, Arab, Jewish, and even Christian astrological writings has a long tradition rich in variations. However, it cannot be traced back into antiquity, but at best into the period of the Sassanians (3rd – 7th cent.).
- Jewish and Muslim authors did not consider Jesus important enough to link his birth with a great conjunction of Jupiter and Saturn. Rather, they were driven by the motive of dating the founders of their own religions, i.e. Moses or Mohammed respectively, near a great conjunction.³⁸² Only Christian authors of the High and Late Middle Ages and the Renaissance, such as Pseudo-Ovid, Roger Bacon, Pierre d'Ailly, and Johannes Kepler, tried to link Jesus to a great conjunction, namely with the triple conjunction in 7 BCE.
- The conjunction in 7 BCE was first brought into play by Christian authors. Jewish and Muslim authors rather associated Jesus with the conjunction of 26 BCE in Leo.
- Jewish and Muslim authors interpreted the historical appearance of Jesus not only in their system of "great conjunctions", but also considered different points of view, such as *sidereal Saturn cycles* (Abū Ma'shar) or *a great conjunction near his death* (bar Hiyya).

If modern Jupiter-Saturn conjunctions are compared with their predecessors, profound differences are found:

In Masha'allah's opinion, the birth of Jesus was indicated by a conjunction *in the royal zodiac sign of Leo in the year 26 BCE*. He dated the birth of Jesus into *the 13th year of this conjunction*, thus into the year 14/13 BCE.³⁸³ On the other hand, Kepler's conjunction of 7 BCE, which

³⁸² They date the birth of Muhammad to 7 February 572 CE, thus in the second year after a Jupiter-Saturn conjunction in Scorpio, which marked the beginning of a water triplicity. About 60 years later, when another conjunction took place in the same zodiac sign, the prophet died. (Abu Ma'shar, op. cit., 2.8.32, in Yamamoto/ Burnett, pp. 148ff.; Masha'allah, according to Kennedy and Pingree, *The Astrological History of Māshā'allāh*, 229v19, p. 10 and 230r1-2, p. 12; translation on p. 48). The conjunction was exact on 29 August 571. However, a close encounter of the two planets had already occurred on 26 February. On Muhammad's birth date, vide Kennedy/Pingree, op. cit., p. 127.

³⁸³ Kennedy/Pingree, *The Astrological History of Māshā'allāh*, pp. 44f., 71f., 94ff. and introduction p. vi.

took place in the water sign Pisces, was considered irrelevant by Masha-'allah. Nor was he interested in the fact that it was a triple conjunction.

- Furthermore, in Masha'allah's opinion and based on the sidereal zodiac used by him, the conjunction of 26 BCE was already *the ninth of a fire triplicity*. On the other hand, Kepler, d'Ailly, and other Christian authors were of the opinion that the triple conjunction of 7 BCE was the *beginning* of a fire triplicity and indicated the beginning of a new age. Modern authors, again, are not interested in the fire trigon at all, but consider the fact crucial that it was a *triple* conjunction in *Pisces*.
- Last but not least, it must be noted that only modern theories link the Jupiter-Saturn conjunction with the Star of Bethlehem, and that this is not done by authors before Kepler. While many authors before Kepler, including Christian ones, wrote about the historical importance of Jupiter-Saturn cycles, Kepler was the first one to mention the Star of Bethlehem in this context. Nevertheless, even to him the idea was foreign that the "star" could have been the conjunction itself or one of the two planets of the conjunction. This idea only appears with Münter, Ideler, and later authors thus only about 1000 years after the first testimony of the theory of conjunctions.

It follows that the theories of Kepler, Münter, and their epigones, although influenced by Persian theories of Jupiter-Saturn cycles, differ massively from them, are not supported by them at all. In addition, it has become evident that the Persian theories are Post-Hellenistic in origin and cannot be traced back to an ancient astrological tradition.

It is also unconvincing to postulate that Matthew's magi must have been familiar with the Persian doctrine of cycles and its usage for world-historical or religio-historical prognoses.³⁸⁴ If the magi had acted according to this doctrine, they would have searched for the baby Jesus based on the conjunction in Leo in 26 BCE and would have had serious trouble finding him. Nor are there any clues that magi in the time of Jesus knew a comparable doctrine that would have been more suitable for finding baby Jesus.³⁸⁵ While it is true

³⁸⁴ Courtney Roberts, The Star of the Magi, pp. 127ff.

³⁸⁵ From a passage in Al-Bīrūnī (*The Chronology of Ancient Nations*, in the translation by Sachau p. 28), van der Waerden concludes that Hellenistic astrologers already "attempted to date the deluge based on the calculation of Jupiter-Saturn conjunctions" ("versuchten, durch Berechnung von Jupiter-Saturn-Konjunktionen die Sintflut zu datieren"; van der Waerden, *Die Astrologie der Griechen*, pp. 244ff.) However, Al-Bīrūnī is a very late author (10th/ 11th cent.). Van der Waerden bases his conclusion on the following statement of Al-Bīrūnī: "The astrologers have tried to correct these years, beginning from the first of the conjunctions of Saturn and Jupiter, for which the sages among the inhabitants of Babel and the Chaldæans have constructed astronomical tables, the Deluge having originated in their country..." (p. 28 in Sachau's translation). However, Al-Bīrūnī does not say that the Babylonian sages

that Babylonian astronomers determined some astronomical cycles with considerable accuracy, namely within the framework of the planetary theories they developed after 500 BCE, there is no mention of "middle" and "great" conjunctions of Jupiter and Saturn in cuneiform or ancient Greek sources. Even if such cycles had been known, it cannot be inferred that an astrological theory of history based on them already existed.

Of course, the absence of historical evidence is not evidence of absence. It cannot be ruled out with absolute certainty that the magi considered the triple conjunction in Pisces to be important in some way or the other. It could have been considered the final conjunction in the water triplicity, thus as the final one in a 900-year cycle. Also, Roberts and Seymour are correct in stating that in Jesus' time the vernal equinoctial point was about to enter sidereal Pisces, which could have been interpreted as the beginning of an Age of Pisces.³⁸⁶ However, *all this is mere speculation* since there is no convincing evidence that ancient astrologers actually considered these factors. Nor does Matthew's account support these speculations.

did the said calculations themselves. Rather, it seems that Al-Bīrūnī is thinking of Abū Ma'shar and other Persian-Arabic astrologers, as becomes obvious a bit later in the text. The reason why Al-Bīrūnī mentions the Babylonian sages might rather lie in the fact that *in his own opinion*, these calculations go back to an ancient tradition. It must be doubted that Babylonian "tables for the conjunctions" of Jupiter and Saturn existed at all. Moreover, it has been shown already that the cuneiform almanac of 7 BCE referred to by Ferrari does not consider the conjunction to be relevant and does not even mention it.

³⁸⁶ Roberts, *The Star of the Magi*, pp. 159ff.

The Venus-Jupiter Conjunction of 17 June 2 BCE

It apparently was the American astronomer Roger Sinnott who first noticed a far more spectacular planetary conjunction that occurred near the time of Jesus' birth.³⁸⁷ On 17 June 2 BCE at 8:20 p.m. Jerusalem local time³⁸⁸, an extraordinarily narrow conjunction of Venus and Jupiter occurred. The two planets, which are the brightest celestial bodies after the Sun and the Moon, approached each other within only 35 arc seconds, i.e. within about 1/50 of the apparent diameter of the Moon. As the human eye has a resolution of about one arc minute, both planets merged optically, forming a single "star", as it were. For observers in the Holy Land, the merging of the two planets took place at an ideal point in time. It was already dark; however, the planets were still standing high in the sky and were very bright.³⁸⁹

It would be wrong to believe, however, that this merging of Venus and Jupiter created a considerably brighter new star. In reality, the brighter Venus just seemed to "swallow" Jupiter, without becoming noticeably brighter.³⁹⁰ Nevertheless, such an occurrence is extraordinary and extremely rare. Usually, planets pass each other at a distance of several degrees, thus at a distance that corresponds to several diameters of the Moon, as was the case with the Jupiter-Saturn conjunction in 7 BCE. European observers in the 20th century could not observe even one merging of planets.³⁹¹ Seymour objects that astrology was not interested in the question whether two planets merged or not.³⁹² As

³⁹⁰ For Venus and Jupiter, this author calculates the magnitudes -4.3m and -1.8m. The resulting magnitude for the "combined star" is -4.4m, which is actually less bright than the greatest possible brilliancy of Venus (-4.89m).

Formula: $m_{total} = -2.5m \cdot lg(10^{-0.4m_1} + 10^{-0.4m_2})$, according to:

 $http://de.wikipedia.org/wiki/Scheinbare_Helligkeit\#Gesamthelligkeit_von_Mehrfachsternen$

³⁹¹ The next merging of planets observable from Europe will be the Mercury-Mars conjunction on 23 August 2032 at 4:24 a.m. UT. However, visibility must be extremely good. Mercury will make its last morning appearance just around this day and will be hard to see. The last event of this kind observable from Europe was the Venus-Jupiter conjunction on 21 July 1859, at 3:47 UT.

³⁹² Seymour, *The Birth of Christ*, p. 122.

³⁸⁷ Sinnott, "Thoughts on the Star of Bethlehem", in: *Sky and Telescope*, December 1968, pp. 384–386.

³⁸⁸ JD 1720860.36869 TDT, calculation using JPL Ephemeris DE406.

³⁸⁹ Based on the planetary tables by Tuckerman (1962), Sinnott calculated that the merging had only taken place when the two planets reached the horizon. However, new calculations based on recent NASA ephemerides and ΔT models indicate that the conditions for observing the phenomenon were a lot more fortunate. Ferrari in his book *Der Stern von Bethlehem* (1994), p. 181, also uses Tuckerman's tables and therefore underestimates this extraordinary celestial spectacle.

regards the contemporary astrological practice, he is certainly right. However, *this* conjunction was a *spectacle*, both for astrologers and laypeople, if they only happened to look up at the darkening western sky. Over several weeks, the two brightest planets approached each other until one evening they united to form a single "star". People must have observed and talked about it. This is rather natural if one lives in a place without modern light pollution.

Attendant circumstances also may have favoured an association with the birth of a king, and thus the Messiah. Firstly, the phenomenon appeared in Leo, the sign (or constellation) that is associated with kingship. Secondly, it happened only 6° from the star Regulus whose name means "little king" and which was also associated with royal reign. And thirdly, Jupiter himself is counted king of the gods and thus the "planet of kings". A conjunction between the king of the gods and the love goddess Aphrodite-Venus could have been interpreted as a love act between the two gods and the procreation of a divine child. Jupiter never mates without fathering children. The conjunction may also have been interpreted as an omen indicating a "king (Jupiter) of love" (Venus) – a name that somehow seems to describe Jesus, even though Venus' love cannot be identified with Christian charity. It must be kept in mind that the astrological quality assigned to Venus is a lot broader than current connotations of a goddess of carnal desire. In any case, this celestial event must have stirred attention in the ancient astrological community.

What do the extant works of ancient astrologers say about this phenomenon? Latin and Greek texts, unfortunately, do not mention it at all. Thus the above considerations, although very plausible, are not explicitly attested. However, there is a cuneiform text that seems to refer to exactly this phenomenon:

(48) šumma ^{MUL}dil-bat ana libbi ^{MUL}dapīnu īrub šar akkadê^{KI} imāt palê inakkir imātma rēdŭ ușși imātma nakru ana māti išappara

If Venus has entered the interior/heart of Jupiter, then the king of Akkad will die, the dynasty will die, the (or: a) soldier will set out and will die, the enemy will send [a hostile message] to the land.³⁹³

³⁹³ Akkadian text D.K., based on: Reiner/Pingree, *Babylonian Planetary Omens*, Part Three, p. 44, VAT 10218, line 48. The expression X *ana libbi Sîn īrub* refers to an occultation of star X by the Moon. (SAA VIII,100, line r 1, quoted below by this author on p. 286) Similar mergings of Jupiter and Venus did not occur for observers in the Middle East between 2500 BCE and 2 BCE, if a maximum angular separation of 1' is allowed. Only if a separation of 2' is allowed, a few events are found (17 March 2332 BCE, 30 Jan. 2189 BCE, 8 Oct. 2184 BCE, 27 July 1640, 26 Oct. 83 BCE). Additional events could have been *inferred* from observations on two consecutive days. The merging mentioned in the text quoted here could go

There is no mention of the birth of a king, only of the end of a dynasty. On the other hand, this was exactly what Herod feared, namely that a new king could replace him and found a new dynasty. Nevertheless, similar predictions would also have been made with other configurations.

Sinnott also makes another interesting point: According to Genesis 49:9f., the coming of the Messiah has a connection with the star Regulus, which most probably is referred to as the "sceptre" between the legs of the Lion Judah, i.e. between the forelegs of the constellation Leo.³⁹⁴ This is exactly the place where the amazing union of planets occurred. Sinnott believes that contemporary Jewish astrologers would have interpreted the phenomenon as indicating the coming of the Messiah.

Was the merging of Venus and Jupiter the Star of the Messiah? Perhaps this is the most attractive explanation ever suggested for the Star of Bethlehem. The final answer, though, depends on how seriously we are inclined to, and may, take individual statements in the Bible. This is in fact a serious problem, because it is hard to say whether the description given by Matthew is correct in detail. However, if we take them seriously, the merging of the planets cannot be the Star of the birth of the Messiah, as Matthew describes it. The following reasons speak against it:

- In the event of the merging, Venus was the *evening star*, and was therefore not in the east in the morning or "at her rising" (ἐν τῆ ἀνατολῆ). It would only have been visible in the evening prior to its setting in the west. We would then have to dispense with the attractive interpretation of *anatole* as a heliacal rising, and return to the traditional translation "in the east", meaning the geographical location where the observation took place.
- Venus moved so quickly that her merging with Jupiter was of very short duration. It took less than two hours and would have been impossible for the magi to observe on several consecutive days.
- The union of Venus and Jupiter is not really consistent with the "actions" of the star as described by Matthew. The star would have to be able to "rise" (ἀνατελεῖν), "appear" (φαίνεσθαι), "go ahead" (προάγειν) and "stand still" (σταθῆναι).
- In those days, astronomers and astrologers were not able to calculate beforehand such a merging of planets. However, this author's studies of the text have shown that the magi were able to calculate the appearance of the Star of the Messiah.

³⁹⁴ vide this author's explanations on pp. 355ff.

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back either to a real observation made on 27 July 1640 BCE or to an event that was not observed, but inferred, or it could also have been merely speculative.

Therefore, this solution does not fit the statements in the Bible, however spectacular an event it may have been.

The merging of the two planets on 17 June 2 BCE also plays an important part in Ernest L. Martin's theory about the Star of Bethlehem. However, he does not identify it with Matthew's star that "rises" and "appears" "goes ahead" and "stands". Rather, he believes that the "star" must have been Jupiter alone and that Matthew is referring to the heliacal rising of Jupiter at the end of July and beginning of August 3 BCE. At that time, Jupiter and Venus were approaching each other to meet in a conjunction near the head of Leo.³⁹⁵ This conjunction, which became exact on 12 August, was not a merger, although the two planets were very near to each other with a separation of only 7¹/₂ arc minutes or ¹/₄ of the diameter of the Moon. Thus, it would be wrong to identify the "rising star" with this conjunction. Another reason why this would be wrong is that the conjunction took place two weeks after the heliacal rising of Jupiter, and very far away from a heliacal rising of Venus, which had been standing in the morning sky already since January. Thus, Martin's view that the "appearing star" was not the conjunction but a particular star is reasonable.

Martin considers this conjunction astrologically relevant because it occurred in the vicinity of the head of Leo and near the star Regulus, during the season in which the Sun also moves through Leo. In astrology, all three of them—Leo, the Sun, and Regulus—symbolised kingship. In addition, this celestial configuration might have been reminiscent of the Messianic prophecy of Gen. 49:9f. and Numbers 24:17, namely, as has been mentioned, the "Lion Judah", the "sceptre between the feet" of Leo (= Regulus), and the "star out of Jacob".³⁹⁶

How does Martin explain the fact that the star "went before" the magi and led them on their way. Firstly, he points out that the merging of the planets on 17 June 2 BCE was observed in the western evening sky, thus, for Babylonians in the direction of Judaea.³⁹⁷ Secondly, he states that Jupiter after its heliacal rising at the end of August and beginning of September 2 BCE was separating from the rising Sun in the western direction.³⁹⁸ However, the latter is a common occurrence that recurs every year after the heliacal rising of the planet. The magi would hardly have considered it an omen such as a clue concerning the birthplace of the Messiah. Also, the fact that the merging of the planets occurred in western direction might not have been astrologically significant. As has been pointed out earlier in the discussion of

³⁹⁵ Martin, *The Star that Astonished the World*, p. 47 and p. 55.

³⁹⁶ Martin, *The Star that Astonished the World*, pp. 47f.; cf. this author's explanations on pp. 355ff.

³⁹⁷ Martin, p. 53.

³⁹⁸ Martin, p. 56.

the Jupiter-Saturn theories, information concerning geographic locations of earthly events would have been derived from various circumstances that had nothing to do with the direction where the star was seen, e.g. from the month in which a celestial event took place, the zodiac sign, the astrological element, or the planets involved.³⁹⁹

Like most other authors, Martin interprets the "standing" of the star as a planetary station, and he concludes that it must have been the station of Jupiter in the constellation of *Virgo* at the end of the year 2 BCE. Martin dates this station to *25 December* and links it with the winter solstice, the Jewish festival Hanukkah, and with *Christmas*.⁴⁰⁰ With accurate calculation, Jupiter made its station on 28 December. Now, the human eye could determine the station of this slow planet only with an accuracy of several days. Jupiter's daily motion had been below one arc minute since 23 December, thus had been considered stationary at least since then, but probably even longer. At best, the magi could have derived a theoretical date of the station from some astronomical calculation. However, this theoretical date of the station would more likely have been 3 or 4 January, not 25 December.⁴⁰¹ Incidentally, Jupiter was just turning retrograde around this date, so that Molnar's idea to interpret the "going before" as a retrograde motion is not possible here.

Also problematic is Martin's assertion that "as viewed from Jerusalem, Jupiter came to its normal *stationary* position directly over Bethlehem on December 25th".⁴⁰² More precisely, he states that Bethlehem is located south of Jerusalem and that on this date Jupiter culminated in the south "at the ordinary time for the Magi's pre-dawn observations".⁴⁰³ However, Jupiter culminated more than two hours *before* sunrise. Mesopotamian astrologers would have been more interested in celestial bodies that culminated just before sunrise and disappeared in the daylight just in that position (the so-called *ziqpu* stars). Also, as has been stated, it was not necessarily the observational direction of a celestial phenomenon that was believed to provide a clue concerning the place where an earthly event would take place.

³⁹⁹ vide pp. 133f.

⁴⁰⁰ Martin, pp. 56ff.

⁴⁰¹ The cuneiform almanac of 7 BCE discussed earlier notes a station of Jupiter on the 22^{nd} of Du'ūzu = 20 July. If synodic cycles are reckoned from this date, then the station intended by Martin did not fall on 25 December 2 BCE, but on 4 January 1 BCE. For this calculation, the synodic arc of Jupiter was taken from Swerdlow, *The Babylonian Theory of the Planets*, p. 84.

⁴⁰² Martin, op. cit., p. 58.

⁴⁰³ Martin, op. cit., p. 59.

Thus, the astronomical and astrological explanations given by Martin for the "going before" and "standing" of the star are not very convincing.

Be that as it may, Martin is obviously aware that the spectacular merging of planets on 17 June 2 BCE is not a suitable candidate for the Star of Bethlehem. Instead, he tries to prove that the "star" must have been Jupiter. This consideration seems reasonable, although, as has been demonstrated, Venus would fit Matthew better than Jupiter.

It must also be noted that the celestial occurrences described by Matthew, namely the appearance, the going ahead, and the standing still of the star, are very common behaviour of a planet and nothing extraordinary. On the other hand, the extraordinary phenomena mentioned by Martin do *not* appear in Matthew, not even in the form of allusions. Besides the spectacular merging of Jupiter and Venus on 17 June 2 BCE⁴⁰⁴, Martin also mentions a very narrow clustering of all planets except Saturn in the end of August 2 BCE⁴⁰⁵ and a triple conjunction of Jupiter with the star Regulus, where Jupiter made a loop above the star and "crowned" it, as it were.⁴⁰⁶ For all these extraordinary celestial events, Matthew does not give even the slightest clue.

All these occurrences will be studied more closely later.⁴⁰⁷ In fact, they might have been astrologically very significant, although this author interprets them differently than Martin does, namely within the context of his own theory, where the Star of Bethlehem is *Venus*. In particular, the extraordinary merging of planets on 17 June 2 BCE could have been associated with the birth of Jesus. It was the first of three Venus-Jupiter conjunctions that occurred that year. The second one took place only a couple of days before the nativity found by this author.

Another clue that may support the Venus-Jupiter conjunction theory lies in the following statement of Matthew (Matt 2:10):

- (10) ἰδόντες δὲ τὸν ἀστέρα ἐχάρησαν χαρὰν μεγάλην σφόδρα.
- (10) When they saw the star, they rejoiced with exceedingly great joy.

The question arises what exactly could have been the cause of this "exceedingly great joy". Was the star particularly beautiful and bright? Is not the appearance of Venus the most beautiful of all the planets, and could she not cause great joy? Alternatively, could the cause of the joy have been the symbolic significance of the star, namely the fact that it indicated the new king? The American astrologer Wayne Turner has made me aware of the fact that

⁴⁰⁴ Martin, op. cit., p. 52.

⁴⁰⁵ Martin, op. cit., p. 53f. This clustering was not observable to the human eye because the Sun formed part of it. However, it could be inferred from the fact that no planet except Saturn was visible, or it could have been calculated.

⁴⁰⁶ Martin, op. cit., p. 51f.

⁴⁰⁷ pp. 389ff.

a Venus-Jupiter conjunction could be interpreted astrologically as indicating "great joy".⁴⁰⁸ When the two "benefic" planets formed a conjunction, this certainly must have been a time of great joy. Turner takes this as a clue that the "star" could have been the extraordinary merger of Venus and Jupiter on 17 June 2 BCE.

Moreover, Turner has pointed out that the same expression "great joy" ($\chi \alpha \rho \dot{\alpha} \nu \mu \epsilon \gamma \dot{\alpha} \lambda \eta \nu$) is also mentioned in Luke's nativity story, where the bright angel appears to the shepherds and announces to them the birth of the saviour. As will be shown later, this angel is nothing other than the Star of Bethlehem. The expression "great joy" thus must have been a current formula in the context of the birth of Jesus.

Let us study the passage in Luke more closely:

(8) Καὶ ποιμένες ἦσαν ἐν τῃ χώρα τῃ αὐτῃ ἀγραυλοῦντες καὶ φυλάσσοντες φυλακὰς τῆς νυκτὸς ἐπὶ τὴν ποίμνην αὐτῶν. (9) καὶ ἄγγελος κυρίου ἐπέστῃ αὐτοῖς καὶ δόξα κυρίου περιέλαμψεν αὐτούς, καὶ ἐφοβήθησαν φόβον μέγαν· (10) καὶ εἶπεν αὐτοῖς ὁ ἄγγελος· Μὴ φοβεῖσθε, ἰδοὺ γὰρ εὐαγγελίζομαι ὑμῖν χαρὰν μεγάλην ἥτις ἔσται παντὶ τῷ λαῷ, (11) ὅτι ἐτέχθῃ ὑμῖν σήμερον σωτὴρ ὅς ἐστιν χριστὸς κύριος ἐν πόλει Δαυίδ·

(8) There were shepherds in the same country staying in the field, and keeping watch by night over their flock. (9) And an angel of the Lord stood by them, and the glory of the Lord shone around them, and they feared [his appearance] *with great fear*. (10) And the angel said to them, "Don't be afraid, for behold, I bring you good news of *great joy* which will be to all the people, (11) [namely] that there is born to you today a Saviour, who is Christ the Lord, in David's city.

In contrast to Matthew, Luke describes a tension between great fear and great joy. The angel *causes* "great fear" (φόβον μέγαν), but *promises* "great joy" (χαρὰν μεγάλην). Now, if the "great joy" is explained by the Venus-Jupiter conjunction, then does it not follow that the "great fear" is also caused by the same configuration? Astrologically, however, great fear does not accord well with Venus and Jupiter, at least not if Hellenistic astrological doctrines are chosen as a criterion. On the other hand, frightening interpretations of Venus-Jupiter configurations are found in cuneiform literature. In the cuneiform text quoted further above on p. 175, a merger of Venus and Jupiter was interpreted as indicating the death of a king. The death of the current king and the rise of a new king may have caused both fear as well as joy. Also in Matthew, the "star" is not only a cause of joy, but also of fear. He writes:

(3) ἀκούσας δὲ ὁ βασιλεὺς Ἡρῷδης ἐταράχθη καὶ πᾶσα Ἱεροσόλυμα μετ' αὐτοῦ,

(3) When King Herod heard it, he was troubled, and all Jerusalem with him.

The same star caused the joy of the magi. Thus, could a Venus-Jupiter conjunction have caused fear as well as joy?

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⁴⁰⁸ Personal communication by e-mail of 2 Jan. 2016.
Turner thinks that the fear and joy could allude to an antagonism between the old panic-sparking *god of shepherds Pan* and the new "*shepherd*" *Christ*. This interpretation is not unattractive. Church father Eusebius linked the birth of Christ with the rumour of the death of Pan that circulated at the time of Emperor Tiberius: Pan allegedly died when Jesus was born.⁴⁰⁹ The importance of the god Pan at the time in the Near East is illustrated by the Pan sanctuary of Banias ($\Pi \alpha v \epsilon i \alpha \zeta$) in the Golan. Astrologically, Turner associates the "panic" of the shepherds with the full moon that rose in the same evening the two planets merged. Here, however, I would object that it is one and the same *angel* that causes fear as well as joy. This angel certainly was not the Moon, but rather the star.

Interestingly, there was another merging of Jupiter and Venus during the lifetime, perhaps even the birth year, of another "messiah" of the Jews, namely *Simon bar Kokhba*. This merging took place on 28 August 105 CE at 4:29 a.m. in the eastern morning sky. In the evening of the same day, the new moon crescent appeared, which means that it was the beginning of a month. If intercalations in spring were determined by the state of maturity of barley, then it could even have been the 1st of Tishri, thus the Jewish New Year's day. Thus, an absolutely extraordinary celestial event was observed just at the end of a year. The merging of the two planets occurred only 2½° from the king's star Regulus, which is considerably less than the 6° distance of the conjunction in 2 BCE. In the preceding days, both Jupiter and Venus had made a very close conjunction with Regulus, with an orb of only slightly more than half a lunar diameter.

No other merger of planets occurred between the two events that could be observed from Jerusalem. Nor was there a merger of a planet with a nearecliptic star such as Regulus, Spica, or Ain (the eye of Taurus).

The following table gives a comparison of the two mergers of 2 BCE and 105 CE^{410} :

⁴⁰⁹ Eusebius, *Praeparatio Evangelica* V.17. Von den Gerüchten um den Tod Pans berichtet Plutarch, *De defectu oraculorum* 17.

⁴¹⁰ Swiss Ephemeris 2.04, based on JPL Ephemeris DE431.

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Jupiter-Venus mergers in 2 BCE and 105 CE, Jerusalem

Date	17 June 2 BCE	28 August 105 CE
Local time	20:24 LAT (17:59 UT) evening, western sky	4:29 LAT (2:08 UT) morning, eastern sky
Brightness	-4.4m (-4.3m + -1.8m)	-4.05m (-3.9m + -1.8m)
Angular distance	35"	43"
Distance from Regulus	5°56' (3 fingers)	2°29' (1 thumb)
Moon	full moon exactly	morning before new moon crescent
Jewish calendar date	14 th of Tammuz (?) solstitial full moon	morning before 1 st of Tishri (?) morning before New Year (?)
Messiah born (?)	Jesus	Simon bar Kokhba

What earthly events could God have announced through the conjunction in 105 CE, in the eyes of ancient Jewish astrologers?

As has been stated already, this conjunction could have been linked with the birth of *Simon bar Kokhba*, whose name means "Simon, son of the star". Bar Kokhba led the last uprising of the Jews against the Romans in 132 - 136 CE. Church Father Eusebius writes about Bar Kokhba:

έστρατήγει δὲ τότε Ἰουδαίων Βαρχωχεβας ὄνομα, ὃ δὴ ἀστέρα δηλοῖ, τὰ μὲν ἄλλα φονικὸς καὶ ληιστρικός τις ἀνήρ, ἐπὶ δὲ τῆι προσηγορίαι, οἶα ἐπ' ἀνδραπόδων, ὡς δὴ ἐξ οὐρανοῦ φωστὴρ αὐτοῖς κατεληλυθὼς κακουμένοις τε ἐπιλάμψαι τερατευόμενος.

At that time, the Jews were led by a man of the name of Barkhokheba, which means "star", who, although he was a murderer and a robber, by means of his name lead [people] to believe like slaves that he had come down for them as a bright star from the sky and shone [above them], the miserable ones. (*Historia ecclesiastica* 4.6.2)

The Bar Kokhba revolt turned into a total disaster. The Jews were killed in great number and exiled from Palestine. Since then and until the foundation of the state of Israel in 1948, they lived in foreign lands.

An Occultation of Jupiter by the Moon?

Most researchers into the Star of the Messiah pay little attention to the teachings of ancient astrology. They confine themselves to looking for a sensational phenomenon during the time of Jesus' birth, which appears *to them* to be sufficiently worthy for ancient astrologers to have connected it to the birth of a messiah. However, if one wants to understand the thinking and the craft of ancient astrologers, a study of the astrology of a Ptolemy or a Vettius Valens is unavoidable. Herod and all in Jerusalem had not noticed anything extraordinary in the sky, and so he called the magi to ask them about it. If an astrological layman or even an astronomer and an experienced sky gazer sees nothing unusual in the sky, an astrologer may nevertheless find that some planet has a powerful ominous position within the context of the whole astronomical configuration and his astrological interpretation methods. A non-astrologer would not have the slightest chance of recognizing this.

Amongst all the writers who have dealt with the Star of Bethlehem, it seems that only Michael Molnar has been aware of this difficulty. He tried to understand ancient astrology and to evaluate possible celestial events based on its own criteria. However, Molnar's preferred planet was Jupiter, not Venus.

Molnar is an astronomer and a numismatist. One day he came across ancient coins from the near east that displayed the zodiac sign of Aries with a star above it. Occasionally the star was accompanied by a crescent moon. Molnar drew the conclusion that this motif must have been a Roman reaction to messianic rumours and an allusion to the same celestial event that Matthew referred to. The discovery that according to Ptolemy and other ancient astrologers Aries represented, inter alia, Palestine and the Lebanon astro-geographically seemed to confirm this conclusion.

Even today a star and a crescent moon are found on a large number of Islamic flags. According to Molnar, this represents a conjunction of the star Regulus and the Moon. Regulus was known as the star of kings; and according to the teachings of ancient astrologers, a conjunction of Regulus and the crescent Moon was favourable for a royal birth.⁴¹¹ Now Regulus is not in Aries but in Leo. And seeing that no other royal star is to be found in Aries, Molnar investigated whether Jupiter, who was also considered a royal star, was not once prominently seen in Aries. He found that according to the teachings of ancient astrology, a celestial configuration formed on 17 April 6 BCE which was favourable for a royal birth, for the reasons that follow:

⁴¹¹ Firmicus Maternus, *Mathesis*, VI.2.2: *Quinta pars Leonis habet stellam lucido splendore fulgentem. In hac stella si crescens lumine Luna fuerit inventa, horoscopi aut MC. partiliter possidens cardinem, regna et maxima potestatis decernit imperia.*

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- There was a close conjunction of Jupiter and the Moon. In fact, Jupiter was occulted by the Moon!
- Jupiter made his heliacal rising in these days (Jupiter Sun = 12.5 degrees).
- Saturn also preceded the Sun in the course of the day.
- The Sun, Jupiter, and Saturn were all in Aries, the sign for Palestine.



Coin from Antioch from the year 55/56 CE (according to M. Molnar). It shows the zodiac sign or constellation of Aries with the lunar crescent and a star. On older coins, the crescent is missing. Coins with ram and star were minted from about 5 CE on.⁴¹²

It is true that the star inside the Moon, as depicted on the coin, strictly taken, would indicate an occultation of the star. Also if one of the two configurations $* \mathbb{J}$ or $\mathbb{C} *$ is seen in the sky and the star is precisely in front of the opening of the crescent, then an occultation is taking place around the same time. However, it must be noted, and Molnar is in fact aware of it, that the conjunction of the Moon with Jupiter was not visible on the date proposed by him because Jupiter still had not made his heliacal rising.⁴¹³ Also, Molnar is aware that the occultation of Jupiter occurred in the middle of the day and thus could not have been observed.⁴¹⁴ In principle, he assumes that the magi did not observe, but only calculated, the whole astronomical configuration with the habit of Hellenistic astrologers. However, the occultation of Jupiter by the Moon could not be calculated using their planetary theories. Molnar is aware of this as well.⁴¹⁵ Nor was it possible to *infer* the occultation from any other observations. Since occultations tend to occur in a series

⁴¹² Molnar, *The Star of Bethlehem*, pp. 49ff.

⁴¹³ Calculations of heliacal risings were made using the Swiss Ephemeris. Even with *very* good visibility (k=0.15), Jupiter appeared only on the 22nd April. Cf. Molnar, p. 95.

 $^{^{414}}$ The Occultation took place between 11:57 a.m. and 1:08 p.m. local time (= 9:34 – 10:45 UT) for Bethlehem, 35E12, 31N42. Molnar writes on p. 86: "On April 17, 6 B.C., the Moon, having circled the sky, returned to Aries and again occulted Jupiter, a little after local noon, when Jupiter was still too close to the Sun to be seen."

⁴¹⁵ Molnar, p. 107: "Mathematics could not predict the nearness of the encounter; this could be determined only visually."

at a monthly interval, the question arises whether the magi could have inferred the event from observed occultations in the preceding and the subsequent months. However, on 20 March 6 BCE, where an occultation took place, Jupiter was also too close to the Sun to be observed. Thus, the occultation was neither noticeable nor calculable, and it seems that Molnar is not right in making reference to it. However, he speculates that the magi could have *speculated* that an occultation was taking place.⁴¹⁶

As has been stated, Molnar has to assume that the Magi either calculated the configuration beforehand or otherwise that early Christian astrologers calculated the configuration in hindsight as a plausible birth date of Jesus.

However, it must be doubted that ancient astrologers would have considered an occultation an auspicious omen. Molnar quotes the following text as an alleged proof, which was written by an anonymous author, the so-called *Anonymus of the Year 379 CE*:

Έαν οὖν εὕρης ἐπὶ γενέσεως τὴν Σελὴνην παραβάλλουσαν ἐνὶ τῶν λαμπρῶν καὶ ἐπισήμων ἀστέρων, τουτέστι περὶ τὰς ἰσομοιρίας αὐτῶν οὖσαν, καὶ μάλιστα ἐὰν κατὰ τὸν ἄνεμον τὸν αὐτὸν τρέχῃ ἡ Σελήνῃ ὄνπερ καὶ ὁ λαμπρὸς ἀστήρ, ὅς σύνεγγύς ἐστι τῶν μοιρῶν αὐτῆς [τῆς Σελήνης], μεγάλας καὶ λαμπρὰς καὶ ἐπιφανεστάτας και εὐπόρους ποιοῦσι τὰς γενέσεις.

If you find that at the birth the Moon catches up with one of the bright and significant stars, i.e. that it is at the same degrees as the same [stars], and, in particular, when the Moon runs according to the same wind, according to which the bright star [runs] that is close to her in degrees, then they make the births great and "bright" and excellent and wealthy.⁴¹⁷

Here, both Robert Schmidt and Giuseppe Bezza interpret the "wind" as the ecliptic latitude of the celestial bodies.⁴¹⁸ Now, if the Moon and the star have the same ecliptic longitude and latitude, then the Moon occults the star. For this reason, Molnar draws the conclusion that this text makes reference to occultations.⁴¹⁹ However, this must be doubted. There is no express mention of an occultation, not even later, when the text comes back to the same kind of celestial configuration. Furthermore, the verb *paraballo*, which is here rendered as "to catch up with", actually rather refers to an *overtaking sideways*. In this author's opinion, the intended meaning of the text is rather that the Moon and the star have to stand on the same side of the ecliptic, i.e. both must have either northern latitude or southern latitude. However, it is not very certain what is meant by "wind" here. The problem shall be stud-

⁴¹⁶ Molnar, p. 86 and footnote 2 on p. 156.

⁴¹⁷ CCAG 5,1, S. 196.

⁴¹⁸ Robert Schmidt in: Anonymus of 379, *The Treatise on the Bright Fixed Stars*, p. 1; Giuseppe Bezza in: Anonimo dell'anno 379, "Stelle lucide, passionali, nocive, soccorritrici", http://www.cieloeterra.it/testi.379/379.html.

⁴¹⁹ Molnar, *The Star of Bethlehem*, p. 79.

ied shortly. While there is mention of conjunctions of the Moon with planets, as well as solar and lunar eclipses, it seems that occultations are not considered, at least not in Greek and Latin sources.

However, occultations do appear in cuneiform omen texts, and interestingly, an occultation of Jupiter is interpreted to indicate the death of a king and a famine in a western country (Amurru). This is the exact opposite of the interpretation suggested by Molnar. Let an original text from the Assyrian State Archives from Nineveh be studied:

⁽¹⁾ šumma ^{mul}Nēberu ina libbi Sîn izziz ⁽²⁾ ina šatti šâti šarru imāt; attali Sîn u Šamaš iššakkan ⁽³⁾ šarru rabû imāt.

⁽¹⁾ When Jupiter has stood in the interior of the Moon, ⁽²⁾ then in this year a (the?) king will die; there will be an eclipse of the Moon and the Sun, ⁽³⁾ [and] a great king will die.

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⁽⁴⁾ šumma ^{mul}Nēberu ina libbi ^dSîn īrub ⁽⁵⁾ sunqu ina māti Amurrî^{ki} ibašši ⁽⁶⁾ šar Elamti^{ki} ina ^{giš}kakki imaqqut ⁽⁷⁾ ina ^{kur}Subarti^{ki} kabtu bēlšu ibār.

⁽⁴⁾ When Jupiter has entered the interior of the Moon, ⁽⁵⁾ then there will be a famine in the land Amurrû; ⁽⁶⁾ the king of Elam will die through weapons, ⁽⁷⁾ [and] in Subartu a noble man will rebel against his lord.

(r 1) 计并不 计译 下 平 下 釽 巛 坦 戶 (2) 但 仁 经 库 (r 1) šumma ^{mul}Nēberu ana libbi Sîn īrub (2) mahīr māti işehhir.

 $^{(r \ 1)}$ When Jupiter has entered into the interior of the Moon, $^{(2)}$ then the market price of the land will decrease.

⁽³⁾ When Jupiter has come out (or: risen?) to the backside of the Moon, ⁽⁴⁾ then there will be enmity in the country.⁴²⁰

Most interesting in the context of the current investigation is the assertion that an occultation of Jupiter will cause a lunar and a solar eclipse. Molnar overlooked the fact that one day after his proposed birthday of Jesus, a solar eclipse occurred. A solar eclipse was expected, although there was no certainty about its visibility and magnitude, and astrologers might have had ambiguous feelings towards it. Although the eclipse reached a magnitude of

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⁴²⁰ SAA VIII,100 (Hunger; transcription and translation D.K.); cf. also SAA VIII, 438; SAA X,84 (Parpola); Hunger/Parpola, "Bedeckungen des Planeten Jupiter durch den Mond", AfO, 29/30 (1983/84), pp. 46–49. The text was probably written on the occasion of the occultation on 27 April 676 BCE.

only 2% in Palestine (however 33% in Rome), Hellenistic astrologers most probably did not consider this date auspicious, the more so as the observability was not necessarily a relevant criterion to them.

According to the Babylonian calendar, the eclipse of 18 April 6 BCE corresponded to the 28th of Addaru II (intercalary month). According to cuneiform sources, an eclipse in the month of Addaru signifies military success of the Babylonian king against his enemies:

šumma ina Addari <[dŠamaš a]ttalê iškun ina šatti šâti> šarru māt nakrišu ibēl mātu ana dannati ipahhur.

If in the month of Addaru [a solar eclipse has occurred: In this year], the king will rule the country of his enemy; the country will gather into fortresses.⁴²¹

In the Jewish calendar, the date could fall in the month of Nisan. The prediction for Nisan reads:

šumma ina [Nisanni ^dŠamaš a]ttalê iškun ina šatti šâti šarru imātma mātu ša lumna īmuru dumqa immar

If in the month of Nisannu a solar eclipse has occurred: In this year, the king will die, and the country that had seen misery, will see happiness.

Returning to Hellenistic astrology, Hephaestion of Thebes interprets eclipses as follows:

ἐπὶ τῶν τελείων ἐκλείψεων τὸ μὲν χρῶμα τὸ μέλαν θάνατον τοῦ ἄρχοντος καὶ ταπείνωσιν καὶ λιμὸν καὶ μεταβολὴν σημαίνει, τὸ δὲ ἐρυθρὸν τῆς χώρας κάκωσιν, τὸ δὲ ὑπόλευκον λιμὸν καὶ θάνατον τοῖς κτήνεσι καὶ ἐμπόροις, τὸ δὲ ἰοειδὲς πόλεμον καὶ λιμόν, τὸ δὲ χρυσοειδὲς λοιμὸν καὶ θάνατον.

With the total eclipses, the black colour signifies the death of the ruler and humiliation and famine and revolution, the red [colour] mistreatment of the country, the whitish [colour] famine and death for the herds and travelling salesmen, the dark blue [colour] war and famine, the golden [colour] plague and death.

A bit later, he writes the following, which fits the eclipse on the 18th April 6 BCE, which fell into Aries:

Μερικῶς δὲ ὑρίσαντο ἐν μὲν Κριῷ ἐκλείψεως γενομένης ἔσεσθαι ἐν Αἰγύπτῷ καὶ τοῖς κατὰ Συρίαν τόποις μέγιστα κακὰ καὶ τοῖς δυνάσταις τῶν τόπων θανάτους καὶ ἐπιβουλὰς καὶ ἀναιρέσεις καὶ τῶν δοκούντων ἐκπτώσεις καὶ στρατοπέδων συγκρούσεις καὶ ἀρπαγὰς καὶ ἐμπρησμούς, ἐν δὲ τῇ Λιβύῃ ὄχλων ἐπαναστάσεις καὶ τῷ ἡγουμένῷ κίνδυνον καὶ τοῖς πρὸς ἀνατολὰς καὶ ἑσπέραν.

⁴²¹ Transcription and translation by D. K., according to Labat, *Un calendrier babylonien des travaux des signes et des mois (séries iqqur îpuš)*, §81, pp. 162f.

In particular, they have explained that when a [solar] eclipse occurs in Aries, greatest evil will occur in Egypt and the regions around Syria, for the rulers of the regions death and assaults and destructions, for the respected banishments, for armies clashes and raids and conflagrations. In Libya, however, [there will be] uprisings of masses and danger for the ruler, also for those east and west from it. ⁴²²

The "regions around Syria" might include Palestine.

Hephaestion's work also demonstrates that Molnar is in error when he states that the *magi*, "although they came from the East, they practiced not archaic Babylonian astrology but a newer Hellenistic astrology".⁴²³ In reality, during the Hellenistic period astrological omen texts of the older Babylonian style were also written in Greek⁴²⁴, Aramaic⁴²⁵, and Egyptian⁴²⁶, and the cuneiform tradition of celestial omens itself was also still alive.⁴²⁷ The "archaic Babylonian astrology", which made predictions concerning the fate of the king and the country (so-called mundane astrology) based on celestial omens observed at the time, was not in competition with the newer astrology, which cast individual birth charts (natal horoscopy). They were two different astrological approaches that served different purposes. Furthermore, cuneiform birth horoscopes from the Hellenistic period also contain a number of elements that are of great importance in the older omen literature, such as the first and last visibilities of the planets, the early or late appearance of the first sliver of the Moon, the dates of the old moon, the full moon, and eclipses. All these data were believed to contain clues about the astrological quality of the greater time frame in which the birth took place. For these reasons,

⁴²³ Molnar, *The Star of Bethlehem*, p. 39.

⁴²² Hephaestion of Thebes, *Apotelesmatika*, I.21; Greek text according to: http://www.astrologicon.org/hephaestion/hephaestion-apotelesmatika1.html)

⁴²⁴ Hephaestion of Thebes describes the mundane effects of eclipses, comets, of heliacal risings of Sirius under various circumstances, the effects of the colours of sunrises and sunsets and their meteorological concomitants, the effects of the phase of the Moon and their concomitants, the effects of halos, mock suns, and other phenomena. He states that he has taken some of these teachings from Egyptian astrologers; however, numerous elements obviously originate from the older Babylonian omen literature.

⁴²⁵ The Brontologion from Qumran, in: Eisenman/Wise, Jesus und die Urchristen, pp. 263-268. Similar brontologia are also extant in Greek language: e.g. CCAG IV, 128ff; VII, pp. 163ff., 226ff.; and in Babylonian (Akkadian) language: Iqqur īpuš §88ff., Labat pp. 172ff.

⁴²⁶ Parker, *A Vienna Demotic Papyrus on Eclipse and Lunar-Omina*. The text is obviously influenced by Babylonian predecessors.

⁴²⁷ It is hard to say for how long exactly. The latest datable tablet of the omen collection *Enūma Anu Enlil* was written in the year 194 BCE, the youngest cuneiform text of astronomical content in the year 75 CE. (Marckham Geller, "The Last Wedge", in: *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 86 (1997): 43–95).

the solar eclipse on 18 April 6 BCE might not be irrelevant for the birth date of Jesus proposed by Molnar. Finally yet importantly, it must be noted that the birth of a Messiah is actually an event of historical importance and therefore actually rather falls into the field of competence of the older mundane astrology. The old Jewish idea of the Star of the Messiah originates from *this* kind of astrology, not from Hellenistic natal horoscopy. Thus, it might be very useful to consider such cuneiform sources, as well as older ones from the Neo-Assyrian and the Neo-Babylonian periods. The latter was also the time of Israel's Babylonian exile, which means that a close cultural contact was made.

It has been shown that the *magi* must have calculated the Star of the Messiah beforehand. Otherwise, if the account of Matthew were nothing but an invention, the star could have been calculated in hindsight by early Christian astrologers. Both would have been possible to the magi. They could have searched for an appropriate configuration and found the date proposed by Molnar. However, this would have required considerable efforts, and it must be doubted that ancient astrologers did this kind of investigation. Even nowa-days, where computers take over the tedious mathematical part of the work, astrologers do not search for future auspicious configurations with the same diligence and complexity that Molnar uses in describing the configuration on 17 April 6 BCE. In the best case, future aspects of slow planets or their ingresses into new signs are considered.

Let us return to Molnar's coins and the star with the crescent and the ram depicted on them. Despite Molnar's beliefs, they need not necessarily make reference to a historical astronomical configuration in Aries. The ram, which probably represented Aries and was linked with Syria astro-geographically⁴²⁸, could have been combined with the old symbol of the star and the crescent, which indicated kingship. The symbol thus could have signified "the kingdom of Syria". Although Antioch belonged to the Roman Empire at that time, it had formerly been the capital of the Seleucid kingdom. Hence, the depiction need not make reference to an historical configuration. This also holds true for the flags of present-day Muslim countries, where the symbol of the crescent with the star often appears. It is nothing but a symbol and does not make reference to an historical configuration. Thus, Molnar's interpretation of the symbol is completely speculative.

Molnar's idea that the star beside the crescent stands for Jupiter is also problematic. The symbol is found from very early times in Near Eastern cultures. In the "Lion Horoscope" on Nemrut Dağı, the star apparently stands for Regulus. In Mesopotamian depictions, however, the star represents the goddess Ishtar-Inana or Venus. The crescent and the planet Venus also appear in Sumerian royal hymns. The texts mention the Sacred Marriage of the king, represented by the crescent, to the goddess Ishtar on the New Year new moon in spring.

⁴²⁸ vgl. Ptolemäus, *Tetrabiblos* II.3; Vettius Valens, *Anthologie* I.2.

It was from this religious ritual that the king gained his legitimacy and power. This old symbolism was very widespread in the ancient Near East, even in New Testament times. In the south Mesopotamian city of Uruk, the ritual of the Sacred Marriage (*paris hašādi*) was still celebrated in Hellenistic times.⁴²⁹ Thus, the crescent with the star originally referred to a New Year new moon, and the star stood for Venus. On the Antiochian coins, the constellation of Aries could have been added for astro-geographical reasons or otherwise because in Jesus' time the vernal new moon occurred in this constellation. Mesopotamian astrology linked this constellation with the god Tammuz, the lover of Ishtar and mythical king. The resulting symbolism is obvious: The ram with the star and the lunar crescent stands for kingship legitimised by the goddess (or by the gods in general).

Finally yet importantly, it can be stated that Molnar's theory does not fit well with the description given by Matthew of the appearance of the star, its retrogradation, and its station. In Molnar's opinion, Jupiter is the Star of Bethlehem. However, the interval between Jupiter's heliacal rising and his first station is about four months. Only then does Jupiter become retrograde, and the next station occurs after a fürther four months. If the birth of Jesus had to coincide with the heliacal rising of the star, and the arrival of the magi with the second station, then this is far too long a time. The *magi* obviously arrive in Bethlehem shortly after the birth of Jesus. Most importantly, Matthew does not mention two stations, but only one.

Another point must also be studied more closely. On the website of the *New Scientist* it is stated that according to Molnar the Roman astrologer Firmicus Maternus (4th cent.)

... described an astrological event involving an eclipse of Jupiter by the Moon in Aries, and said that it signified the birth of a divine king.⁴³⁰

Although this assertion is repeated hundreds of times on the Internet, that does not make it true. Molnar makes reference to a passage in Firmicus' astrology textbook *Mathesis* 3.3.9 and gives the following translation:

If Jupiter comes into aspect with the waxing Moon, this will create men of almost divine and immortal nature. This happens when the Moon is moving toward Jupiter. It is difficult to observe this. ...⁴³¹

Even without consulting the original Latin text, it is obvious that there is no talk of an occultation, but, at best, of *the Moon moving towards an aspect*

⁴²⁹ par-iş šá ha-šá-du; Linssen, The Cults of Uruk and Babylon, S. 184/188. Zu den parşū hašādi s. auch CAD H 134 (hašādu).

⁴³⁰ http://www.newscientist.com/article/dn1713-early-christians-hid-the-origins-of-the-bethlehem-star.html

⁴³¹ Molnar, *The Star of Bethlehem*, pp. 105f.; idem, "Firmicus Maternus and the Star of Bethlehem", pp. 3-9. Molnar is quoting from the translation by Jean Rhys Bram (1975, Park Ridge, NJ).

with Jupiter, which, however, usually does not result in an occultation. Molnar infers the occultation only from the statement that "it is difficult to observe". His idea is the following: Because an occultation could not be calculated, it had to be observed. However, astronomical observations are often difficult or impossible, e.g. if a celestial event takes place below the horizon or during the day or when the sky is overcast. This is of course a very speculative interpretation of the passage.

Molnar goes even further. He believes that Firmicus makes reference to two historical horoscopes in the context, namely to the one of Augustus and the one of Jesus, the latter being the one proposed by Molnar, that is the horoscope of 17 April 6 BCE. As will be shown, this theory is not tenable either. Let us study the original text:⁴³²

Et si coniunctionem cum vento Lunae crescentis exceperit, divinae atque immortalis paene substantiae homines procreabit. Opportet autem semper [observare] eum, si sic Iuppiter fuerit collocatus, quo vento currens Luna ad eum feratur; difficile enim ista ratio colligetur⁴³³. Nam si in aquilone constituto Iove ex austro recedens Luna crescenti⁴³⁴ ac pleno lumine se iunxerit, in quinto scilicet Iove loco ab horoscopo constituto et his signis, quibus gaudet, vel in domiciliis suis vel in altitudine sua per diem dumtaxat, faciet invictos imperatores et qui totius orbis gubernacula teneant, praesertim si sic Iove collocato in his Sol signis, in quibus gaudet vel in quibus exaltatur, trigonica se ei radiatione coniunxerit. Gaudet autem per diem Solis ac Saturni radiatione adornatus, praesertim si in matutino ortu fuerit constitutus.

This difficult text can be rendered as follows in a rather literal translation and preserving the syntax and logic of the original:

And if he (Jupiter) takes on a connection (*coniunctio*) with the wind of the waxing Moon, he will bring forth men of almost divine and immortal nature. However, one always has to observe, if Jupiter is placed like this, which wind the Moon uses to move running towards him. For this configuration is difficult to conceive. For, if Jupiter is located in the north wind and the Moon connects herself with him from the south wind⁴³⁵, in separative motion⁴³⁶

⁴³² (Kroll/Skutsch,) Iulii Firmici Materni Matheseos Libri VIII, vol. I, p. 108.

⁴³³ A variant has *colligitur*.

⁴³⁴ Instead of *crescenti* one obviously has to read *crescente*.

⁴³⁵ In Bram's translation as used by Molnar the expression *ex austro* is wrongly rendered as "from the east". Kroll/Skutsch does not mention a variant of the text that would justify this translation.

⁴³⁶ This might refer to a *separative aspect* of the Moon with Jupiter, as becomes obvious from similar statements a bit later in the text (III.3.12; cf. also Paul of Alexandria, *Eisagogika* 17 and 18). The verb *recedere* means either "to recede", thus referring, e.g., to the elongation from the Sun (II.8. 4), or otherwise it is a synonym of *defluere* (IV.1.10) and refers to the so-called "separation" (ἀπορρέω, ἀπόρροια) from an exact aspect, whereas "application" (συνάπτω, συναφή) is expressed by the terms *se coniungere* or *se objicere* (III.3.12).

[and] in waxing phase and (or?) full light, (where⁴³⁷ Jupiter, as has been stated,⁴³⁸ is located in the fifth place from the ascendant and in a sign where he rejoices, be it one of his domiciles or his exaltation, but only during the day,) then he will bring forth invincible emperors and those who hold the steering oar of the whole world, especially if Jupiter is placed like this and at the same time the Sun makes a connection with him through the radiance of a trigon, being located in signs in which [the Sun] rejoices or in which he is exalted⁴³⁹. For, during the day, he rejoices when he is adorned by a radiance (= aspect) from the Sun or Saturn, especially when he is located in the matutinal rising.

Firmicus' conditions for an "almost divine and immortal nature" thus are as follows:

- The Moon is in waxing or full moon phase.

– The Moon, standing in the south wind, forms a separative aspect with Jupiter, who is standing in the north wind.

- Jupiter is located in the 5^{th} place (= house) or in a sign in which he is well placed, such as a domicile, the exaltation, or his trigon (a fire sign).

- It is a day-time horoscope.

- Supportive, but not mandatory, conditions would be the Sun located in a sign where he is well placed and in a trine aspect with Jupiter, or alternatively, Saturn in a trine to Jupiter.

- Another supportive, but not mandatory, condition would be Jupiter in heliacal rising.

In order to avoid fatal errors in the interpretation of the text, the terminology used by Firmicus must be examined carefully. For example, the term *coniunctio* does not necessarily mean "conjunction" here. Instead, it denotes *any* astrological aspect connecting two planets.⁴⁴⁰ So, when Firmicus mentions a *coniunctio* of Jupiter with the Moon, he does not refer to a conjunction at all, but to any kind of aspect. For this reason, Bram's translation (as quoted by Molnar) correctly renders the word *coniunctio* as "aspect".

⁴³⁷ The German translation by Hagal Thorsonn is unfortunately incorrect here: "... und beide im 5. Ort der Genitur, außerdem im Hause oder den Grenzen des Jupiter bei einer Taggeburt stehen ..." (p. 101).

 $^{^{438}}$ The condition in parentheses was already mentioned at the beginning of the paragraph on Jupiter in the 5th place (house) and apparently still holds in this passage. (III.3.8)

⁴³⁹ In reality, the Sun is "exalted" in only one sign, not in several, as implied by the Latin text, namely in Aries.

⁴⁴⁰ This special usage of the term *coniunctio* is particularly obvious, e.g., in *Mathesis* VI.3, where there is talk of trigon aspects. He writes: *Si itaque Saturnus Iovi fuerit* trigonica radiatione coniunctus, *et pigra et deiecta loca vitaverit ista* coniunctio, ... *infinitas copias cum magna felicitate decernunt*. ("Thus, if Saturn is *coniunctus* with Jupiter in a *trigon radiation*, and if this *coniunctio* avoids inert and depressed places (= houses), ... then they indicate unlimited wealth with great happiness.") (VI.3.2)

There is the difficult question what is meant by the position of the Moon "in the south wind" and of Jupiter "in the north wind". The real cardinal direction can hardly be intended. Molnar believes that the "north wind" represents north and therefore a zodiac sign with high northern declination. The two northernmost signs are Gemini and Cancer. Now, since Jupiter ought to be located in one of his domiciles or his exaltation and since the exaltation of Jupiter is in Cancer, Molnar assumes Jupiter in Cancer, and he points out that Jupiter was also in Cancer in the natal horoscope of Augustus.⁴⁴¹ Following the same logic, the Moon, which is located "in the south wind", must be in either Sagittarius or Capricorn, which, again is in agreement with the natal configuration of Augustus, who had the Moon in Capricorn. However, Molnar misses this latter point because the translation used by him (the one by Bram) wrongly renders *ex austro* as "from the east" instead of "from the south wind".

However, this interpretation of the terms "north wind" and "south wind" is very unlikely. Their usage for *the two signs of maximal northern and south-ern declination* is not attested in Firmicus' textbook, nor can it be found with other ancient authors. Moreover, Firmicus himself in *Mathesis* II.12 provides a very different definition for his *astrological* usage of the four winds or car-dinal directions. If possible, we should try to find an interpretation of the text in agreement with his own ideas. Firmicus assigns the four winds symbolically to the four astrological elements, which are also called triplicities or trigons. The north wind rules the fire signs, the south wind the earth signs, the east wind the air signs, and the west wind the water signs.⁴⁴² From this background, Jupiter "in the north wind" should actually be located in a fire sign, thus not in Cancer, as in the horoscope of Augustus, but either in Aries, Leo, or Sagittarius. On the other hand, the Moon would have to be placed

⁴⁴¹ According to Suetonius (*De vita caesarum, Augustus* 5), Augustus was born on 23 September 63 BCE shortly before sunrise in Rome:

Natus est Augustus M. Tullio Cicerone C. Antonio conss. VIIII. Kal. Octob., paulo ante solis exortum, regione Palati, ad Capita bubula, ubi nunc sacrarium habet, aliquanto postquam excessit constitutum.

[&]quot;Augustus was born under the consuls Marcus Tullius Cicero [and] Caius Antonius on the 9th before the Calends of October shortly before sunrise, in the region of the Palatine Hill, at the Ox Heads, where there is a sanctuary now, which was built some time after his death."

Whether this date is to be taken according to the Julian calendar or the pre-Julian Roman calendar, is unfortunately debated. However, for the current investigation this is not very relevant. What is important is that Molnar takes it as a Julian date.

⁴⁴² Illud etiam nos scire convenit, quae signa quibus sint subiecta ventis; haec enim nobis scientia maxime in apotelesmatibus necessaria est. Aquiloni subiacent signa Aries Leo Sagittarius, Austro Taurus Virgo Capricornus, Afelioti, quem nos Solanum dicimus, Gemini Libri Aquarius, Africo, qui a Graecis Libs dicitur, Cancer Scorpius Pisces. (Firmicus, Mathesis, II.12)

in an earth sign, thus either in Capricorn, Taurus, or Virgo. Moreover, since the earth signs form aspects of 90° , 150° , and 30° with the fire signs, but only the 90° angle, i.e. the square, is a valid aspect with Firmicus⁴⁴³, it follows that the Moon must be in square to Jupiter. Other aspects are impossible.

This interpretation of "north" and "south" may seem weird, since it blatantly contradicts present-day astronomical definitions of "north" and "south". However, present-day definitions are irrelevant here. Firmicus' assignment of cardinal directions and winds to zodiac signs is not of an astronomical, but of an astrological, i.e. symbolical, nature. This example shows how easily it can happen that modern concepts are projected into ancient astrological texts, resulting in completely wrong interpretations.

However, a problem still remains even with this interpretation. According to the text, Jupiter should be able to stand in one of his domiciles or in his exaltation at the same time, i.e. in Sagittarius, Pisces, or Cancer. However, only Sagittarius is ruled by the north wind. But then, why should Pisces and Cancer be considered at all?⁴⁴⁴ Now, perhaps one should not be too pedantic here. Firmicus does not provide an alternative interpretation of the four winds or cardinal directions. Furthermore, similar theories can also be found in other ancient authors.⁴⁴⁵ However, if one wants to take the problem seriously and if the configuration described by Firmicus has to allow for both domiciles and the exaltation of Jupiter, one has to look for a different solution. Unfortunately, there is no other passage in Firmicus that could help to shed light on the usage of the four winds.⁴⁴⁶ One would have to look for alternative definitions in other ancient authors, e.g., in Hephaestion of Thebes⁴⁴⁷

⁴⁴⁶ The only other place where Firmicus mentions the winds is *Mathesis* III.3.20, but this text does not help in solving the problems discussed here.

⁴⁴³ The aspects are introduced in *Mathesis* II.22.

⁴⁴⁴ Incidentally, a similar problem also appears with Molnar's solution because only Jupiter's exaltation sign Cancer would be ruled by the north wind, whereas the two domiciles, namely Pisces and Sagittarius, are out of the question.

⁴⁴⁵ Paul of Alexandria, *Eisagogika* 2 and 18. However the mapping is a bit different here: fire = east wind, earth = south wind, air = west wind, water = north wind. More variations of this doctrine are found in Vettius Valens, *Anthology* III.4, in Antiochus, CCAG VII p. 128, and on the cuneiform tablet BM47494 rev. 17-22 (Rochberg, *The Heavenly Writing*, p. 109).

⁴⁴⁷ Hephaestion of Thebes defines the arc of a celestial body from its rising to its setting as "northern", again in a purely "symbolical" sense and opposing modern astronomical concepts, and the arc from the setting to the rising as "southern". At the same time, he takes into account aspects of the Moon with the planets as well as the so-called application (συναφή) and separation (ἀπόρροια). In fact, this theory is strongly reminiscent of the passage in Firmicus, and it would also be compatible with Jupiter in any sign and in the 5th place. Unfortunately, this theory does not solve the problem either, because if Jupiter is in the 5th place, he is *below* the horizon and therefore not in the north wind, but in the south wind.

or Paul of Alexandria⁴⁴⁸. Unfortunately, we cannot explain this text of Firmicus even by using the explanations given by these authors. Still, Hephaestion and Paul may provide a clue about how to solve this problem. Perhaps the winds stand for phases in the diurnal motion of the celestial bodies over the horizon and meridian. Perhaps Firmicus does actually intend the approximate

The passage in Hephaestion reads as follows:

Άποδείκνυσι δὲ ἕκαστα πρὸ τῆς ἀναπτύξεως τοῦ ζώου διατεθεῖσα ἡ καταρχή, καὶ μηνύουσιν ὁ μὲν ὡροσκόπος τὸν θύοντα, τὸ δὲ δῦνον τὸ θυόμενον ἢ τὸ ἱερεῖον, τὸ δὲ μεσουράνημα τὸν θεὸν ἢ τοὺς θεούς, τὸ δὲ ὑπόγειον τὴν τῆς ἑστίας αἰτίαν καὶ τὴν ἕκβασιν τοῦ πράγματος καὶ δι' ὃ θύεται· τούς τε ἀστέρας ἐπιθεωρητέον ἐν οἶς γέ εἰσι τόποις καὶ τάξει καὶ φάσει καὶ τοὺς τέσσαρας κλήρους – τύχης, δαίμονος, ἀνάγκης, ἕρωτος. τὸ δὲ δεξιὸν μέρος τοῦ σπλάγχνου προσεῷκει τῷ ὑπὲρ γῆν ἡμισφαιρίῳ, τὸ δὲ εὐώνυμον τῷ ὑπὸ γῆν, καὶ οἱ πλανῆται δὲ ἑῷοι μὲν ὄντες ἐν τοῖς δεξιοῖς σημαίνουσιν, ἑσπέριοι δὲ ἐν τοῖς λαιοῖς, καὶ ἡ Σελήνη δὲ ἐν τῷ βορείῳ ἡμισφαιρίῳ τὰ δεξιά· ἀνερχομένη γὰρ τὰ βόρεια σημαίνει ἕως τῆς καταβάσεως, τὰ δὲ λαιὰ κατιοῦσα νότον ἕως τῆς ἀναβάσεως. καὶ ἐπὰν δὲ εὕρης τινὰ τῶν ἀστέρων τὸν αὐτὸν ἄνεμον τρέχοντα συνάπτοντα τῆ Σελήνῃ, κατὰ τὴν ποιότητα αὐτοῦ καὶ τὴν δύναμιν τὸ μέρος ἐκείνου τοῦ σπλάγχνου ἐξομοιώσας προαγορεύεις.

"The point in time at the beginning [of the sacrifice] before the opening of the victim is able to indicate all things. And the ascendant signifies the sacrificer, the descendant what is being sacrificed, the midheaven the god or the gods, and the point below the earth (i.e. the lower midheaven) the cause of the sacrifice (lit. altar) and the aim of the [sacrificial] act and that because of which it is sacrificed. And the planets must be investigated, [namely] in which places they are and in which arrangement and phase, and the four lots, [namely] the one of Fortune, of Daemon, of Necessity and of Eros. The right part of the innards corresponds to the hemisphere above the earth, the left one to the one below the earth. And the planets, when they are matutinal, give omens on the right side, however when vespertine, on the left side. And *the Moon*, when she is in the northern hemisphere, [signifies] the right side. For when she ascends, she signifies what is northern until the setting, however the south when she sets until the rising. And if you find that one of the planets moves in application and in the same wind towards the Moon, then you predict according to [the planet's] quality and power, comparing it with the [corresponding] part of the innards."

(Hephaestion of Thebes, *Apotelesmatika*, III.6; translation D. K. Greek text: http://www.astrologicon.org/hephaestion/hephaestion-apotelesmatika3.html)

⁴⁴⁸ In Paul of Alexandria, there is also an assignment of the four winds to the astrological elements. However, he gives a different definition again, where the four winds are assigned to the four quadrants of the horoscope, namely the east wind to the quadrant from the ascendant to the midheaven, thus from the rising to the culmination, the south wind to the quadrant from the midheaven to the descendant, thus to the setting, the west wind to the quadrant from the descendant to the lower midheaven, and the north wind to the quadrant from there to the ascendant. (Paul of Alexandria, *Eisagogika* 7 and 17 (near the end of the paragraph), as well as scholion 39) Unfortunately, this statement is also incompatible with Firmicus' condition that Jupiter can be in the 5th house, which here would fall into the west wind. cardinal directions where the planets are located at the time of the birth. In fact, Jupiter in the 5^{th} place (= house) would be approximately in the northern direction, but below the horizon.

Despite all these uncertainties, it is obvious that the passage from Firmicus Maternus does not fit the horoscope of Emperor Augustus. The only conditions mentioned by Firmicus that are fulfilled by the horoscope of Augustus are the fact that his natal Moon is waxing and that Jupiter in Cancer is exalted.⁴⁴⁹ However, this is by far not enough to be significant. To the contrary, the horoscope of Augustus actually contradicts some conditions that are mandatory for an "almost divine and immortal nature": For example, it is mandatory is the condition that Jupiter must be in the 5th house. The chapter that the passage under discussion is taken from is entirely about Jupiter in the 5th *house.* However, in Augustus' birth horoscope Jupiter is in the 11th house. Another condition that is not fulfilled is the one that it has to be a day birth. Augustus was born shortly before sunrise and thus must be considered a night birth. Finally, regarding the fortunate position of Jupiter "in the north wind", we are unable to say what exactly Firmicus is referring to. If his statement were based on his own definition of the four winds, then it would follow that Jupiter has to be in a fire sign, i.e. Aries, Leo, or Sagittarius. However, in Augustus' birth chart Jupiter is in the water sign of Cancer.

Finally, Firmicus' text does not fit Molnar's Jesus horoscope of 17 April 6 BCE either. As previously discussed, there is no clue in the text regarding the importance of an occultation of Jupiter. It does not even refer to a conjunction, but as has been stated, more probably to a square aspect. Another point that stands against Molnar's nativity is that Firmicus mentions a *waxing* or *full moon* as a condition for the "almost divine and immortal nature". This condition is also mandatory, not optional. However, Molnar's Jesus horoscope has an old moon, i.e. the last sliver of the Moon.

⁴⁴⁹ In addition, Molnar states that "the Moon in Capricorn fulfils the important condition for a luminary ruling its triplicity in its sect (night)" (Molnar, "Firmicus and the Star of Bethlehem", p. 7). However, this condition is *not* found in the passage in Firmicus and therefore should not be considered a valid condition for an "almost divine and immortal nature".

Star-shaped Aspect Figures

Could the Star of Bethlehem have been a hexagonal aspect figure? If six celestial bodies are spaced 60° (a sextile) from one another around the ecliptic, they form a hexagon. On plotting the trines, i.e. the 120° angles, in such a horoscope, two equilateral triangles are obtained that together form a hexagram or a Star of David. Could the Star of Bethlehem have been such an aspect figure?

To this author's knowledge, only esoterics hold that view. In a channelled text by White Eagle of the year 1930, it says:

The Star is the symbol of the perfect life, the perfect balance, of the Christman. The six-pointed star is the Star of Bethlehem, which again means the Star of the Son of man. 450

According to a concrete theory, the figure of the heliocentric hexagram of 2 March 5 BCE (Jul.) would be the Star of Bethlehem.⁴⁵¹ This date, however, clearly cannot be considered. Firstly, ancient astrologers and astronomers had no knowledge yet of heliocentric horoscopes. Secondly, this hexagram includes the planets Uranus and Neptune, which were only discovered in the 18th and 19th centuries.

Nevertheless, the idea of an aspect figure shaped like the Star of David seems promising. An upward pointing and a downward pointing triangle are united – an alchemical symbol of the joining of the earthly with the divine. Astrology considers the sextile (60°) and the trine (120°) to be harmonious aspects. Thus, a hexagon and a six-pointed star seem to symbolise something like perfect harmony. The words of White Eagle quoted above seem to make sense immediately.

Before starting a search for such a celestial Star-of-David configuration, one should consider the phenomenon from a theoretical point of view. First, it has to be borne in mind that planetary aspect figures are seldom very precise. Modern astrology defines so-called "orbs", that is, maximum deviation from exactness, for an aspect figure to still be valid. For instance, if one chooses an orb of 5°, every angle distance of 60° +/- 5° is considered to be a sextile. However, ancient astrology did not yet operate with orbs. For them, planets were positioned in sextile aspect if the signs in which they appeared, that is their initial points, were 60° apart. Accordingly, a six-pointed star would then have existed if a celestial body had occupied every second zodiac sign.

 $^{^{450}}$ after http://www.gaiamind.com/m-star.html ; copyrights for this quotation are held by the White Eagle Publishing Trust, UK.

⁴⁵¹ http://www.aloha.net/~johnboy/christpi.htg/christpi.htm . The theory was first published in: John Charles Webb, Jr., "In Pursuit of the Birth-Chart of Jesus", December 2000, Dell Horoscope Magazine.

Furthermore, it must be borne in mind that Mercury never appears more than 28° and Venus never more than 47° from the Sun. Therefore, these three celestial bodies cannot form part of such a hexagon or Star of David at the same time. They could do so only if they were in conjunction with each other. If the Sun is positioned at one point of the six-pointed star, it is impossible for Mercury to be at an adjacent point. Whether Venus could be positioned at a different point of the star than the Sun depends on how precise one wants the star to be. As has been stated already, ancient astrologers took liberties with aspects. For them, a sextile already existed if the zodiac signs in which the two planets appeared were positioned in sextile to one another. The Sun and Venus would then form a sextile if they were not situated in either the same or adjacent zodiac signs. Considering all this, it can be concluded that only the following combination of bodies would work, if the Sun was included as part of the star:

Sun - Moon - Venus - Mars - Jupiter - Saturn

In this, an orb or inaccuracy arc of 15° is tolerated because of Venus' average maximum elongation of only 45° . This was acceptable to ancient astrologers, as noted earlier.

If the Sun is not included, Mercury and Venus can occupy different points. Their combined maximum elongations of 28° and 47° total 75° , and this is greater than 60° . The combination of planets is then as follows:

Moon - Mercury - Venus - Mars - Jupiter - Saturn

In principle, this aspect figure can have a high degree of exactitude. However, as has been stated, this was not necessary in ancient astrology. Example horoscopes given by the ancient astrologer Vettius Valens also show how inaccurate calculations were then. With Jupiter and Saturn, there frequently is a mistake of more than 10° in the calculation.⁴⁵²

In principle, the two lunar nodes could also occupy two points of the star. Ancient astrology used lunar nodes in the same way that modern astrology does. If the nodes were allowed in the aspect figure, far more combinations would become possible, although a star dependent on a lunar node would probably be inferior.

In the time between 10 and 5 BCE, there is only one date with a six-pointed star fulfilling the conditions described, namely 20 and 21 November 5 BCE: Saturn was in Aries, Jupiter in Gemini, the Moon in Leo, Venus in Libra, Mercury in Sagittarius and Mars in Aquarius.⁴⁵³

However, the inexactitude of the aspects is appalling. The least exact aspect, the one between Mars and Venus, should actually be a trine (120°) but it looks more like a square (96° \approx 90°). The deviation from a trine amounts to

⁴⁵² according to my own investigations

⁴⁵³ It does not matter whether we use a tropical or a sidereal zodiac.

approximately 24°. In addition, stars of David of this inferior quality are not particularly rare. The star figure of 19 July 17 CE was considerably more accurate. The least exact aspect of that figure diverges from its ideal value by barely 9°. Such comparatively exact Stars of David are fairly rare.⁴⁵⁴

Indeed, the Star of David that can be considered for the birth of Jesus on 20 and 21 November 5 BCE is certainly not one of the best examples. However, as the exactitude of aspects was not important to ancient astrologers, this is not an argument against the Star of Bethlehem having been a Star of David. It may be more significant that Stars of David are not particularly rare, as long as one dispenses with exactitude.

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⁴⁵⁴ The following list shows the best Star-of-David aspect figures between 1000 BCE and 2000 CE:

	20 Dec.	966 BCE (-965) (9.3)	
	1 July	755 BCE (-754) (9.3)	
	27 Dec.	381 BCE (-380) (6.5)	
*	28 Sept.	183 BCE (-182) (8.4)	(with the Sun)
	19 July	17 (9.0°)	
*	29 Nov.	207 (8.0°)	
*	5 July	429 (7.0°)	
*	3 Oct.	493 (9.9°)	
	9 Jan.	673 (9.4°)	
	12 Feb.	684 (8.8°)	

(There were no more aspect figures of comparable accuracy from 684 to 2000 CE.)

As usual, the dates are given according to the Julian calendar. The degree figures in brackets indicate how much the least accurate aspect in the figure diverges from its ideal value. Asterisks (*) indicate that the condition, that the planets forming part of the figure may only occupy every second zodiac sign, has *not* been fulfilled. Reference system is the tropical zodiac.

As against that, in the Star of David of 5 BCE, which is considered for the birth of Jesus, two aspects have an orb (inaccuracy arc) of more than 20°. Such inaccurate figures occur once in every five to ten years.



Not a very precise representation of the Star of David's aspect figure of 20 November 5 BCE (-4). The aspect between Venus and Jupiter is too imprecise to be charted with the orbs on which this diagram is based. The aspect between Venus and Mars is actually closer to a square than a trine. Yet, astrologers would probably have regarded this figure as a hexagon in those days.

Instead of the hexagram or Star of David, one could also consider a pentagram as the Star of the Messiah. In the eight-year cycle of the Sun and Venus, Venus makes five synodic cycles. Consequently, the points in the zodiac where five successive heliacal risings of Venus take place form a pentagram. The symbolic connection between Venus and all the goddesses of fertility of the Near East makes this figure interesting. In fact, the figure of the Virgin Mary has inherited much from them.⁴⁵⁵ Furthermore, it must be recognised that in magic, the five points of the pentagram were allocated to the five planets, Mercury, Venus, Mars, Jupiter and Saturn.⁴⁵⁶ On 16 August 5 BCE (aspect fault < 9.8°) and on 16 March 2 CE (aspect fault < 7.1°) pentagrams were formed that were worthy of the name. However, the objection that in ancient astrology the pentagram and the quintile aspect were

⁴⁵⁵ Beautifully documented in: Silvia Schroer and Othmar Keel, *Eva – Mutter alles Lebendigen. Frauen- und Göttinnenidole aus dem vorderen Orient*, Bibel + Orient Museum, Fribourg, 2004.

⁴⁵⁶ For example Eliphas Levi. However, this author does not know where this tradition originated.

not in use is serious. The same would apply to the septile $(51^{\circ}25'43'')$ and the octile (45°) , from which seven- or eight-pointed stars could be formed. Here, though, one would have to include lunar nodes in the figure, as otherwise there would not be the requisite number of planets for the numerous points of the star shapes.

The question remains whether a star-shaped aspect figure would match the Bible's statements about the Star of the Messiah. The answer must be in the negative. The statement that the star went ahead of the magi and stopped at a certain point in time cannot be explained in this way. The beautiful interpretation of the "appearing" of the star in the east as a heliacal rising cannot be considered either. It seems to this author that no single statement in the Bible points to the fact that the Star of Bethlehem was a star-shaped aspect figure.

Sirius and the Belt Stars of Orion

The American writer Dorothy M. Murdock⁴⁵⁷ (alias Acharya S) holds the view that the "Three Kings" represent the three belt stars of Orion and the "Star in the East" stands for Sirius. For, if the line of the belt stars is extended in an easterly direction, then one arrives at Sirius. Therefore, the "Three Kings" point to the "Star in the East", as it were. The heliacal rising of Sirius played a very important role in ancient Egypt. It marked the beginning of the Nile flood and the commencement of a new agricultural year. Orion was identified with Osiris and Sirius with his wife Isis. The rising Sun at the heliacal rising of Sirius can be identified with Horus, the son of Osiris and Isis.⁴⁵⁸

In fact there are parallels between Jesus and the mythology about Osiris, Isis, and Horus. Osiris is a vegetation deity who dies every year and revives again. Jesus' birth, death, and resurrection are also celebrated in a yearly rhythm in the liturgical year (Christmas, Good Friday, Easter). Egyptian representations of young Horus on the lap of Isis are strongly reminiscent of Christian representations of the Madonna with the baby Jesus. In Catholic theology Jesus also has the title "Sun of Righteousness". Therefore, Jesus can be compared to the Horus boy, the newborn sun god, and also associated with the dying and reviving god Osiris.

A serious problem with Murdock's theory is the fact that the designation of the belt stars of Orion as "the Three Kings" is not attested in Antiquity, either in pre-Hellenistic Egypt or in the Hellenistic world.⁴⁵⁹ In astronomical works of the 19th century they are called the "Three Kings" or even "Three Magi", because on one side they point to Sirius and on the other to the Hyades and Pleiades.⁴⁶⁰ The designations were apparently known in the Anglo-Saxon and French language areas and are also found on Dutch sky

⁴⁵⁷ Murdock, *Christ in Egypt*.

⁴⁵⁸ In the Pyramid Texts (3rd millennium BCE), the falcon god Horus in his manifestation as Hor-akhty ("Horus of the horizon") probably represented Venus as the morning star. Later, Horakhty was identified with the sun god Re. (Krauss, *Astronomische Konzepte und Jenseitsvorstellungen in den Pyramidentexten*, p. 216ff.)

⁴⁵⁹ Murdock makes reference to the "three kings" in Plato (Murdock p. 206). However, this is a highly unlikely association. The alleged connection of the three stars with the Pyramids of Giza, as proposed by Robert Bauval in his controversial *Orion Correlation Theory*, does not provide proof of the existence of the designation "Three Kings".

⁴⁶⁰ According to Burritt, *The Geography of the Heavens*, p. 43: "They are sometimes denominated the *Three kings*, because they point out the Hyades and Pleiades on one side, and Sirius, or the Dog-star, on the other." Vide also: Allen, *Star Names and their Meaning*, p. 316.

maps and nautical compendia of the 17th and 18th centuries.⁴⁶¹ Their actual origin is unknown or difficult to investigate. While there seems to be a tradition behind Murdock's theory about the Star of Bethlehem, it is mostly built on speculative grounds. At best, one could argue that it is very plausible that ancient Egyptian observers used the belt stars of Orion in their observations of the heliacal rising of Sirius. They could have served as a valuable pointer to the position of the hardly visible rising Sirius. With some goodwill, one could also take into account the fact that in Mesopotamia, the constellation of Orion was called "the righteous shepherd of heaven" (SIPA.ZI.ANNA), and that "shepherd" was a title of Mesopotamian *kings* (e.g. Gilgamesh, Urnammu, Shulgi). However, why should this have been relevant for Egypt? And why is there no supporting evidence from Hellenistic texts?

In the configuration described at the beginning of this chapter, the Sun appears on the eastern horizon shortly after Sirius. That is, Sirius is rising heliacally. Horus is born as the Sun god, as it were, by his mother Sirius-Isis. From this, the following equations can be derived:

Sirius rises with the Sun.

- = Isis gives birth to Horus.
- = Mary gives birth Jesus.

These equations may seem compatible with the Catholic view that Mary is the "morning star" (Sirius, in the current context) and Jesus the "Sun of Righteousness". However, they are not in agreement with the Bible. According to Rev. 22:16, Jesus is the "morning star", not Mary. The interpretation of Jesus as the "Sun of Righteousness" and Mary as the "morning star" is an invention of church fathers of late antiquity. Considering the nature of a heliacal rising, it would also make more sense to say that the Sun gives birth to the star than that the star gives birth to the Sun. In fact, the Woman of the Apocalypse in Revelation 12, who bears a child and whom tradition identifies with Mary, is "clothed by the Sun", and in depictions she is surrounded by sunrays, creating the impression that she herself is the Sun.

Moreover, in Matthew 2, there is no mention of "three kings" who came to adore the baby Jesus. Instead, there is talk of an uncertain number of *magi*. As has been demonstrated, the church of the 2nd and 3rd century speculated that they must have been "kings", based on Psalm 72:10-11.⁴⁶² That there were *three* of them is also a speculation, probably derived from the fact that they brought three gifts with them: frankincense, myrrh, and gold.

Therefore, the fundamental question to be asked here is not whether the statements made in the *Bible* originate from Egypt, but rather whether the state-

⁴⁶¹ http://en.wikipedia.org/wiki/Orion_%28constellation%29.

⁴⁶² Vide this author's explanations on pp. 54f.

ments made by the *church and the tradition* about it could originate from Egypt. Still, the latter may also be an interesting question.

Now, Murdock believes that Christians took over the Christmas festival, i.e. the celebration of the birth of Christ on 25 December, from the Egyptians. This seems to be supported by Plutarch to some degree, who reports in his book "On Isis and Osiris" that in Egypt the birth of young Horus (Harpocrates) was celebrated on the winter solstice with a sacrifice of lentils, which were available at the beginning of the harvest season.⁴⁶³ Murdoch links this theory with the risings of Sirius and Orion as follows:

Indeed, the bright star Sirius rose with the sun at the summer solstice, signaling the birth of Osiris as the Nile inundation and the birth of Horus as the daily solar orb. In winter, the Three Kings in the belt of Orion pointed to Sirius at night before the annual birth of the sun, which, as we have seen, is also Horus.⁴⁶⁴

As regards the second sentence, it must be stated that the three belt stars *always*, no matter at what time of the day or season, point to Sirius. The statement concerning the winter makes only sense if Murdock is referring to the acronychal rising of Sirius, i.e. to its rising at the moment of sunset. However, it seems that Murdock does not have a clear understanding of these astronomical events. Such doubts are further increased when she makes the following statement:

In fact, it was observed that, as the rising of Sirius signaled the beginning of the summer solstice and its life-giving inundation of the Nile, the rising of Orion, with its three distinct stars acting as a pointer, signified the end of the flooding, towards the winter solstice.⁴⁶⁵

In reality, Orion made its heliacal rising *after*, not before Sirius. On the other hand, if Murdock is referring to the *acronychal* rising of Orion, then her account is seriously confused. However, she seems to intend the *heliacal* rising, since this also seems to be the intended idea of the source used by Murdock, namely the Egyptologist B. Mojsev. Mojsev writes:

Both Sirius and Orion were related to the Nile flood. The ascent of Sirius during the third week in June heralded the beginning of the Nile's steady rise. By August in Upper Egypt, and September in the north, the river swelled to its full capacity. Then, stars from the constellation of Orion emerged in the night sky after being invisible for seventy days. At this time, the river began to abate. By November, it was back in its bed.⁴⁶⁶

⁴⁶³ Plutarch, *De iside et osiride* 65 (377b); Murdock p. 83. Cf. this author's explanations on p. 47 and footnote 80.

⁴⁶⁴ Murdock, p. 205.

⁴⁶⁵ Murdock, p. 203.

⁴⁶⁶ Quoted by Murdock, p. 203.

Since the appearance of the stars of Orion is preceded by a 70-day period of invisibility, Mojsev can only be referring to a *heliacal* rising of the constellation. However, this is in conflict with the actual astronomical situation, because Orion became completely visible in the morning sky *before* Sirius. Furthermore, it must be noted that according to Mojsev the said stars appeared long *before* the winter solstice. Even the end of the flooding, allegedly indicated by them, was already completed by the end of November, thus about a month before the winter solstice.

In order to make sense out of Murdock's statement that the belt stars pointed to Sirius on the winter solstice, one has to assume that she actually refers to an *acronychal rising of* Sirius.

Murdock links it with the birth of Jesus as follows:

Thus, it could be asserted that the three kings trailing the bright star announced the birth of the savior at the winter solstice in Egypt, ages prior to the same event purportedly taking place in Judea.⁴⁶⁷

Incidentally, in Matthew the magi may have been "trailing" the star. However, the three belt stars of Orion precede Sirius in the course of a night.

Next to be investigated is the question of whether the correlations mentioned by Murdock between the astronomical configurations and seasons were actually given, in what epoch this was the case, and how accurate these correlations were in the time of Jesus. To begin with, it can be stated that these correlations were indeed given in historical times, however only for certain epochs. Due to the precession of the equinox, they lost their validity within only a few centuries. Both the heliacal rising of Sirius on the summer solstice and its acronychal rising on the winter solstice were valid only for a limited period of time.

The *heliacal* rising of Sirius occurred on the *summer solstice* in Saqqarah⁴⁶⁸ in about the year 2900 BCE. At the same time, of course, the three belt stars of Orion ("the three kings") pointed to the brightening star above the horizon. In addition, Sirius appeared in exactly the same place where the Sun rose on the *winter solstice*.⁴⁶⁹ Egyptian astronomers may actually have noticed this remarkable fact. On the other hand, on the winter solstice, Sirius and Orion did not have any prominent position either at sunrise, sunset, or at midnight. It could be argued that they played an important role in that both of them were visible almost all night long and therefore characterised the night sky during this time of the year. Nevertheless, in 2900 BCE, Sirius and Orion

⁴⁶⁷ Murdock, p. 206.

⁴⁶⁸ This location is chosen because it is the place of the pyramid of Unas, which contains the Pyramid Texts referred to by Murdoch.

⁴⁶⁹ Declination of the Sun: -24°01; of Sirius: -22°09. The declinations of Sirius and the winter solstitial Sun were identical around the year 3400 BCE. However, in that epoch, the heliacal rising of Sirius did not fall on the summer solstice.

played a prominent part only on the summer solstice, not on the winter solstice which is associated with the birth of Jesus.

Only around the year 1200 BCE did the *acronychal rising* of Sirius occur on the *winter solstice*, in the evening shortly after sunset. In this epoch, the line of the belt stars of Orion still pointed to Sirius, but no longer to the spot where the Sun rose on the winter solstice.⁴⁷⁰ However, there was indeed a direct connection between Sirius and the winter solstice. The winter solstice coincided with the acronychal rising of the star.

However, since Murdock makes reference to the Pyramid Texts, which were composed in the Old Kingdom of Egypt (2700-2200 BCE), the configuration of 1200 BCE is irrelevant to these texts. They could at best reflect the configuration in 2900 BCE. Now, Murdock asserts that the legend of the Three Kings and the star refers to the traditional birth date of Jesus on 25 December, thus on the winter solstice. From this point of view, the configuration of 1200 BCE seems to fit better.

However, Jesus was born about 1200 years later than this. So, what was the configuration of Sirius and Orion like in his time? The acronychal rising of Sirius occurred about 11 days after the winter solstice. For the time of Jesus, it obviously did not fit 25 December. It actually fit the date of Epiphany better. Of course, old traditions may have survived long after their astronomical expiration date. In addition, it is quite possible that Egyptian astronomers noticed the remarkable situation in 1200 BCE. However, are there any sources that actually prove these assumptions? Murdock should have realised and discussed all these issues.

To sum up, Murdock's theory has serious shortcomings:

1. The theory is not based on the Bible but on ideas developed by the church fathers. In the Bible, there is no mention of "three kings", but of an uncertain number of *magi*. In addition, according to Rev. 22:16, Jesus is the morning star, not Mary. Also, it is Mary who is related to the Sun, not Jesus, as is obvious from the figure of the Woman of the Apocalypse in Revelation 12.

2. Murdock cannot substantiate her theory with Egyptian sources that explicitly link the birth of Horus with the acronychal rising of Sirius on the winter solstice. Most importantly, there are no sources that prove that Egyptians interpreted the three stars of the belt of Orion as "three kings" who pointed to a new-born child represented by Sirius.

²⁰⁶

⁴⁷⁰ Declination of the Sun: -23°50; of Sirius: -17°32.

The Star Spica in the Constellation of Virgo

The American astronomer Elias Colbert (1892) and the German Philosopher Arthur Drews (1923) both held the view that the Star of Bethlehem could have been *Spica*, the brightest star of Virgo, and that the constellation of Virgo could have represented the Holy Virgin, with Spica representing the baby Jesus.⁴⁷¹ At first glance, this idea may seem appealing. Could the birth from a virgin have been nothing but a myth that was related to seasonal changes and the stars? He writes:

Trotzdem liegt auch dem Stern der Weisen eine wirkliche Sternerscheinung zugrunde... Das aber ist, wie gesagt, das Sternbild der Jungfrau, das um die Mitternacht der Wintersonnenwende am östlichen Himmel zu sehen war, als Christus geboren sein soll, und das mit einem Kinde auf dem Arm, mit einer Ähre in der Hand oder als ein Büschel Ähren dargestellt wurde (Stern Spica). Wenn die Sonne im "Hause" der Jungfrau stand, im Monat August und September, war die Zeit der Ernte. Das Sternbild konnte demnach auch als "Haus der Ernte" oder "Haus des Brotes", hebr. Beth Lehem, bezeichnet werden. So konnte in der Tat gesagt werden, daß der junge Lichtgott Christus, dessen Geburt sich im unteren Meridian vollziehen sollte, während die Jungfrau oder Beth Lehem am östlichen Horizont erglänzte, als Sohn einer Jungfrau zu "Bethlehem" geboren wurde und daß der Aufgang jenes Sternbildes im Osten den Magiern oder Astrologen den Eintritt dieses Ereignisses anzeigte.⁴⁷²

Nevertheless, a real appearance of a star is at the basis of the Star of the Wise Men, too... And this is, as has been stated, the constellation of Virgo, which was visible at midnight on the winter solstice in the eastern sky, when Christ was allegedly born, and which was depicted with a child on the arm, an ear [of wheat] in the hand, or a bundle of ears (Star *Spica*). When the *Sun* stood in the "house" of the *Virgin*, in the months of August and September, it was the time of harvest. The constellation could thus also be designated as "house of harvest" or "house of bread", in Hebrew: Beth Lehem. Thus, it could in fact be stated that the young light god Christ, whose birth was to occur in the lower meridian at the time the *Virgin* or Beth Lehem shone forth on the eastern horizon, was born as the son of a virgin in "Bethlehem" and that the rising of that constellation in the east announced to the magi or astrologers the advent of the event.

Drews assumes the nativity at midnight on the solstice, thus, symbolically fitting, in the greatest darkness of the year and the greatest darkness of the night, where the "new Sun" is born every year, as it were. Just around this time, the celestial virgin rose above the eastern horizon. Since this configuration recurred every year, Matthew's "account" of the Star of Bethlehem

⁴⁷¹ Chicago Tribune 23.12.1900, p. 34, "Says Star of Bethlehem was the Fixed Star Spica"; Colbert, *Humanity in its Origin and Early Growth* (1892), pp. 181 and 390; Arthur Drews, *Der Sternhimmel in der Dichtung und Religion* (1923) ..., pp. 228f.

⁴⁷² Drews, *Der Sternhimmel in der Dichtung und Religion...*, p. 228f.

would have been nothing but a myth of the winter solstice. Drews thus gives only a symbolical interpretation of Matthew 2. He does not believe that it describes a onetime historical occurrence that was connected to a one-time historical birth. He did not even believe in the historicity of Jesus.

Nowadays, the rising of Virgo cannot be observed anymore in the middle of the Holy Night because the position of the constellation relative to the solstice has considerably changed during the past 2000 years.

Even then, it is a nice coincidence that this configuration was observable roughly in the time of Jesus. Astrologers could have been aware of it. Interestingly, however, early Church Fathers, such as Justin Martyr, Origen, Ignatius of Antioch, etc., although they considered the Star of Bethlehem to have been a real astronomical phenomenon, seem to have been completely unaware of a possible astral background of the Holy Virgin and her Son, let alone the interpretation of Spica as the Star of Bethlehem. This is even more astonishing in view of the Woman of the Apocalypse of Revelation 12, where a female figure clad by the Sun and having the Moon below her feet rises in the sky and gives birth to a son. This interesting text will be discussed later in detail. That this kind of idea was avoided might be explained by the fact that they did not want to "debase" the Christian teaching with astrological concepts. They wanted to have nothing to do with the constellation of Virgo, and as for the Star of Bethlehem, they searched for alternative explanations. In Origen's opinion, the star was a comet, and Ignatius believed it was a nova. In eastern authors and apocrypha, one can find the idea that the magi saw a virgin inside the star, not the star inside the heavenly virgin. One may argue that since the early Middle Ages, paintings of the holy virgin show so-called *spicas*, i.e. stars, in the forehead or shoulder of the virgin or in both places. In reality, however, the star Spica is neither in the forehead nor in the shoulder of Virgo; instead, she carries it in her left hand and near her knee or thigh.

The idea that the constellation of Virgo could represent the Madonna with baby Jesus only appears in the writings of scholars of the High and Late Middle Ages, such as Albertus Magnus, Pseudo-Vergil (*De Vetula*), or Pierre d'Ailly. They learned this from a statement made by the Persian astrologer and Muslim philosopher Abū Ma'šar (9th cent.) in his work "The Great Introduction into Astrology" (كتاب المدخل الكبير إلى علم أحكام النجوم), in Book 6, chap. 1. This book had been available in Europe since the 12th century in a Latin translation. The Arabic original of this passage reads as follows:

السنبلة وامّا السنبلة فانّها ذات جسدين ولها ثلاث صور ويطلع في الوجه الاوّل منها جارية يسمّيها تينكلوس ايسين وهي عذراء مليحة نظيفة طويلة الشعر حسنة الوجه في يدها سنبلتان وهي جالسة على كرسيّ عليها فرش وهي تربّي صبيّا صغيرا وتطعمه المرق في موضع يقال له اتريا ويسمّي ذالك صبيّ بعض الامم ايسوع ومعناه عيسي ويطلع معها رجل جالس على ذالك الكرسيّ ويطلع معها كوكب السنبلة وموخّر الحيّة المائية وراس غراب وراس اسد The [constellation of] Virgo has two bodies (*ğasdun*) and three forms (*şūratun*). In her first decan, a girl rises, whom Teucer calls Isis; and she is a beautiful, pure virgin with long hair and lovely countenance; she has two cereal ears in her hand and sits on a throne, which has cushions on it; she rears a small boy and feeds him broth in a place that is called atrium; some peoples call this boy \bar{Isu}^{+} (i.e. Jesus). Together with her, a man rises, who sits on this throne, and the star [called] Ear (= Spica) rises with her, and the back part of the Hydra, the head of the Raven, and the head of the [*dodekaoros*] Lion.⁴⁷³

Abū Ma'šar mentions that "some peoples" (بعض الامم) call this child Jesus, thus obviously identifying Virgo with Mary. Furthermore, he mentions the Egyptian astrologer Teucer "of Babylon" who lived in the 1st century CE and identified Virgo and her child with the Egyptian goddess Isis and her son Horus. The text provides nice evidence that the representations of Isis with young Horus are a religio-historical predecessor of the Madonna with baby Jesus.

In the west, Teucer had long been forgotten by the time of Abū Ma'šar. Fortunately, however, the passage he wrote about Virgo was preserved by the Egyptian astrologer Rhetorius, who lived in the 6th or 7th century. The text was published in 1903 by Franz Boll and reads as follows:

Πάρθενος. Τῷ μὲν πρώτῳ δεκανῷ παρανατέλλουσι θεά τις ἐπὶ θρόνου καθεζομένη κὰι τρέφουσα παιδίον, ἥν τινες λέγουσι τὴν ἐν ἀτρίῳ θεὰν Ἱσιν τρέφουσαν τὸν Ώρον· παρανατέλλει δὲ καὶ στάχυς καὶ τὰ μέσα τῆς ὕδρας καὶ ἡ κεφαλὴ τοῦ κόρακος καὶ ἡ κεφαλὴ τοῦ λέοντος τῆς δωδεκαώρου.⁴⁷⁴

Virgo. Together with the first decan rise [the following figures]: some goddess who sits on a throne and feeds a child, which according to some is the goddess Isis feeding Horus in the Atrium; and at the same time also rises the cereal ear and the middle of the Hydra and the head of the Raven and the head of the Lion of the *dodekaoros*.

The astrologer Antiochus of Athens, a contemporary of Teucer, also knew the constellation of Virgo as "a woman who rears a child" ($\gamma \acute{\nu} \nu \eta \pi \alpha \imath \acute{\delta} (\nu \rho \sigma \sigma \dot{\alpha})$. The motif of the celestial Madonna with child can be traced back even further. E.g., it is found in a relief of the zodiac that formerly adorned a ceiling in the Hathor temple of Dendera in Upper Egypt, but now is displayed in the Louvre. In this relief, which was created in the Late Ptolemaic period (1st cent. BCE), *two* figures that could be associated with Virgo are depicted behind Leo, *namely a virgin with a cereal ear in her hand as well as a sitting Isis with young Horus on her knee.*

⁴⁷³ Abū Ma'šar, (كتاب المدخل الكبير إلى علم أحكام النجوم), 6.1, text according to the edition by Karl Dyroff, in: Boll, *Sphaera*, pp. 512-513. Here, the Lion is not the common constellation or zodiac sign of Leo, but the sign of the Lion in the so-called *dodekaoros*. The *dodekaoros* was originally a system of 12 parts of the day and was later transferred, among other things, to the 12 parts of the year that correspond to the zodiac signs. In this system, the Lion corresponds to the zodiac sign of Virgo. ⁴⁷⁴ Boll, *Sphaera*, p. 18.

Strictly speaking however, neither Abū Ma'šar nor Teucer give even the slightest clue that the son and the ear (Spica) should be identified. Nor did the mentioned authors of the European Middle Ages draw this conclusion or mention the Star of Bethlehem in this context. In reality, it seems that the sitting woman with the child is not identical with the constellation of Virgo but that *she rises synchronously with the first decan (i.e. the first third) of the sign of Virgo.* Thus, are the celestial Madonna and Virgo different from each other, just as seems to be indicated in the zodiac of Dendera? J. A. Seiss and E.W. Bullinger were of the opinion that the woman with the child on her knee represented the constellation of Coma Berenices to the north of Virgo.⁴⁷⁵ Similar to Werner Papke, they believed that the Star of Bethlehem was a Nova that appeared in this Egyptian Madonna constellation.⁴⁷⁶ However, the zodiac of Dendera seems to indicate that the constellation of the Madonna was not to the north but to the south of Virgo.

Apart from that, Teucer and Abū Ma'šar state that the star of the Ear (Spica) rose synchronously with the celestial Madonna and her child. This again seems to indicate that the Ear must be distinguished from the Madonna and her child. What is confusing, however, is the fact that the Ear is here assigned to the *first* decan of Virgo, whereas in reality it belongs to the *third* decan. This problem cannot be solved just by giving a different definition of the constellation of Virgo. The decans were not defined relative to the single constellations, but relative to a normalised zodiac of 12 signs of 30° each, in which the star Spica fell at the end of the third decan (at 29° Virgo). The question arises whether the "ear" referred to by Teucer could actually be a different star or group of stars. Perhaps Coma Berenices? However, the star Spica seems to be too well-attested as the ear in the hand of Virgo.

Another problem that could belong to the same context, arises from the fact that in current depictions of Virgo, which go back to the star catalogue in Ptolemy's Almagest (2^{nd} cent. CE), and therefore to Hipparchus (2^{nd} cent. BCE), the celestial virgin holds the ear in a downward position so that the star Spica is located near her thigh or knee; however, in Egyptian and Mesopotamian depictions, the virgin holds the ear upward so that it results located in front of her face. It seems that there were two different traditions with completely different definitions of the constellation of Virgo. Interestingly, in medieval representations of the Madonna, one finds stars, the so-called *spicas*, not in the hand, but in the forehead or shoulder of the Virgin. Does this representation go back to the Egyptian / Mesopotamian definition of the constellation of Virgo? Again, the question arises of whether the ear could have been a different star here. Alternatively, was the position of Virgo's

⁴⁷⁵ Seiss, *The Gospel in the Stars*, p. 76f. ; Bullinger, *The Witness of the Stars*, p. 34.

⁴⁷⁶ Seiss, op. cit., pp. 432f.; Bullinger, op. cit., pp. 36ff.; cf. this author's remarks concerning Werner Papke's theory on pp. 167f.

body relative to the star Spica completely different from the position that results from Ptolemy's star catalogue? However, as has been stated, even then Spica could not fall into the first decan of Virgo.

Despite these problems, from the 13th century on, the western tradition identified the constellation of Virgo with Mary who breastfeeds baby Jesus. This interpretation was initiated by Abū Ma'šar's citation from Teucer, and it was obviously supported by the Woman of the Apocalypse in Rev. 12, the astral nature of which is evident. Accordingly, the Bible itself seems to support this interpretation, although, to this authors knowledge, this connection first appears only in the work of Charles François Dupuis (1742-1809).⁴⁷⁷ That it is not present in the early Middle Ages can be explained from the fact that the astrological tradition was exterminated during the Christianisation of the Occident. Thus, despite the problems discussed above, the question remains to be asked whether in the case of the Woman of the Apocalypse, which obviously represents Virgo, Spica could not represent her son.

Bullinger asserted that the Hebrew name of the star Spica was *semah* (גָּטָה), "branch, sprout". This word appears only four times in the whole Old Testament and refers to the Messiah in all these cases. In reality, however, the Hebrew name of this star in Biblical times is unknown. It seems that Bullinger draws this conclusion from the Arabic name of the star, which is *as*-*Simāku 'l-'a'zal* (السماك الأعزل).⁴⁷⁸ However, Arabic *simākun* is etymologically unrelated to Hebrew *semah*⁴⁷⁹, nor does it mean "branch" or "sprout", but only appears as a star's name under the Verb *sammaka*, "to thicken", together with the word *samakun*, "fish". It is thus pure speculation that the star Spica was already associated with the "Branch" and the Messiah in the Old Testament.

A different Hebrew name for Spica, namely *zera*^{*i*}, "seed", was proposed by Dwight Hutchison and "some Christian circles".⁴⁸⁰ This name is also speculative and is not supported by ancient sources. However, there is a remarkable associative link between Jesus and the ear of wheat. Hutchison refers to the "seed of the woman" in Genesis 3:15:

⁴⁷⁷ Malina, *Die Offenbarung des Johannes*, pp. 169f. Malina refers to Dupuis, *Origine de tous les cultes*, vol. 6, 1st part, pp. 183ff. and *Abrégé de l'origine de tous les cultes*, p. 287ff.

⁴⁷⁸ Bullinger, The Witness of the Stars, pp. 31f.

⁴⁷⁹ According to the phonetic laws of the Semitic languages, Hebrew *s-m-h* would correspond to Arabic *s-m-h/h*, whereas Arabic *s-m-k* would correspond to Hebrew *s-m-k/q*. At best, Arabic *simākun* could be a late loanword derived from Hebrew *semah*, bypassing the phonetic laws. However, this is pure speculation. It is also quite unlikely, considering the fact that the star Arcturus is also called by this name, namely *as-simāku* (*'r-rāmih*). Thus, Arcturus would be a *semah*, too.

⁴⁸⁰ Hutchison, *The Lion Led the Way*, p. 152

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וְאֵיבָהוּ אָשִׁׁית בֵּינְדָּ וּבֵין הָאָשֶׁׂה וּבֵין זַרְעֲדָ וּבֵין זַרְעֵה הָוּא יִשׁוּפְדָּ רֹאשׁ וְאַתָּה תִּשׁוּפֵנּוּ עָקַב: ס

καὶ ἔχθραν θήσω ἀνὰ μέσον σου καὶ ἀνὰ μέσον τῆς γυναικὸς καὶ ἀνὰ μέσον τοῦ σπέρματός σου καὶ ἀνὰ μέσον τοῦ σπέρματος αὐτῆς· αὐτός σου τηρήσει κεφαλήν, καὶ σὺ τηρήσεις αὐτοῦ πτέρναν.

And I shall put enmity between you (the snake; D.K.) and the woman and between your seed (*zera*') and her seed: He will bruise you on the head, and *you* will bruise him on the heel. (Gen. 3:15)

The "seed of the woman", who bruises the head of the snake, is traditionally believed to be Jesus. Hutchison thinks that the verse also alludes to the constellation of Virgo and the star Spica. According to his theory, the Passover full moon on 30 March 3 BCE, which took place in Virgo and in conjunction with Spica, as well as the conjunction of the Sun with Spica on the Day of Atonement (Yom Kippur), namely on 20/21 September 3 BCE, were important "signs" for the "wise men" from the east that announced to them the coming of the Messiah. In addition, Yahweh's promise to David that his "seed" would rule forever can be interpreted as referring to the Messiah, thus to Jesus.

Another clue to the connection between Jesus and the star Spica could be contained in the Parable of the Grain of Wheat:

ἐἀν μὴ ὁ κόκκος τοῦ σίτου πεσὼν εἰς τὴν γῆν ἀποθάνῃ, αὐτὸς μόνος μένει· ἐἀν δὲ ἀποθάνῃ, πολὺν καρπὸν φέρει.

Unless the grain of wheat falls into the earth and dies, it remains alone; but if it dies, it bears much fruit. (John 12:24)

Here Jesus is talking of himself and his crucifixion. The grain of wheat is Jesus himself. The last supper can also be seen in this context:

καὶ λαβών ἄρτον εὐχαριστήσας ἔκλασεν καὶ ἔδωκεν αὐτοῖς λέγων· Τοῦτό ἐστιν τὸ σῶμά μου τὸ ὑπὲρ ὑμῶν διδόμενον· τοῦτο ποιεῖτε εἰς τὴν ἐμὴν ἀνάμνησιν.

And having taken some bread and given thanks, he broke it and gave it to them, saying, "This is my body, which is given for you; do this in remembrance of me." (Luke 22:19)

Also interesting is the fact that Jesus was allegedly born in Bethlehem (כֶּחֶם). As stated further above in a citation from Drews, the name of this city means "house of bread" or "house of food".⁴⁸¹ Is this another astral allusion, and could Spica, the ear of wheat, represent the Messiah and Jesus? The idea is not uninteresting.

Thus, returning to the theory of Drews, he believed that the Star of Bethlehem was the star Spica in Virgo. In the time of Jesus, it was seen rising above the eastern horizon at midnight on the winter solstice. Unfortunately,

⁴⁸¹ However, the Arabic name of the city, *bayt lahm* (بيت لحم), means "house of meat".

however, this view cannot be easily reconciled with Matthew, who states that the magi saw the star *in its rising* and explicitly mentions the star's *appearance*, obviously after a period of invisibility. It is a lot more likely that he was talking of a *heliacal* rising of the star, thus not a rising at midnight but a rising in the morning, shortly before sunrise. In the time of Jesus the heliacal rising of Spica occurred around 8 October (6 October greg.), but in 1000 BCE it occurred near the autumnal equinox. Could Matthew's "account" go back to an old astronomical teaching according to which the heliacal rising indicated the autumnal equinox? This is possible, but remains speculative.

A different interpretation of the Star of Bethlehem as Spica was proposed by the American astronomer Elias Colbert (1900). Colbert maintained that Persian magi in 500 BCE noticed that the star Spica was slowly moving south, that it was approaching the celestial equator and that it would eventually cross it. Colbert describes this phenomenon, which is related to the precession of the equinox, as follows:

The star Spica was more than three degrees north of the celestial equator when the prophet-priest of the Bactrian school discovered that it was moving slowly southward, and reasoned that a Messiah would come upon the earth when, reaching the limit, the star would be on the line, rising precisely in the east and setting exactly on the west point of the horizon – thus passing from the upper hemisphere to the lower one.⁴⁸²

The crossing of the celestial equator would thus have symbolically indicated the incarnation. Based on this prophecy, the magi would have carefully observed the position of Spica over centuries and would have tried to determine the exact year in which the star would rise exactly in the east and set exactly in the west. Thus, Colbert tried to interpret the magi's statement (Matt 2:2):

εἴδομεν γὰρ αὐτοῦ τὸν ἀστέρα ἐν τῇ ἀνατολῇ

for we have seen his star in the east (or in its rising)

as meaning that the star rose *exactly* in the east. The same explanation has recently been maintained by Willibrord Oomen (2015). Oomen is aware that this kind of observation was by no means trivial, and he attempts to explain exactly the way in which these observations could have been made.⁴⁸³

Colbert apparently tried to answer this question, too, since the article in the *Chicago Tribune* quotes him as follows:

⁴⁸² *Chicago Tribune* 23.12.1900, p. 34, "Says Star of Bethlehem was the Fixed Star Spica". The citation given here, which was taken from the *Chicago Tribune*, allegedly stems from a book by Colbert, which was "ready for press" just before Christmas 1900. However, this author could not find any other clues to the existence of such a book. It possibly never appeared. A similar, although not identical, passage is found in Colbert's book *Humanity in its Origin and Early Growth*, p. 181 (cf. also p. 390). This book had been published 1892.

⁴⁸³ Oomen, Spica the Star of Bethlehem?

[The star Spica] was on the celestial equator at the zero of declination, thirty-two years before the 'Vulgar Era,' and twenty-eight years before the now generally accepted date for the birth of the Messiah.

And:

It, however is evident from calculations made by Professor Colbert, that the star rose on the same point of the horizon as the lowest point on the disc of the equinoctial sun in the spring of the year 4 B.C.; and the author adduces reasons for thinking that the birth may have occurred at that time, instead of at the preceding winter solstice.

It is correct that Spica crossed the celestial equator in the year 32 BCE. However, Colbert wanted to send the magi to Bethlehem in the year 4 BCE, and therefore needed a modified theory of this "crossing". However, the following problems must be taken into account and solved:

- The yearly motion of Spica due to the precession of the equinox amounted to 40" in right ascension and 18" in declination. Even with accurate measurement devices, these motions were not easy to detect by the naked eye, which normally has a resolution of about one arc minute.

- Even the determination of the east point with an accuracy of one arc minute was not a trivial matter.

- As a result of atmospheric extinction, a star is *not* visible at the moment it rises above the horizon. Depending on its brightness, it only becomes visible several degrees above the horizon. However, since stars do not rise vertically, a star that rose exactly on the east point, by the time it became visible, would have wandered a bit southward and would no longer be seen exactly in the east. In addition, since the extinction is variable, the star's deviation from east at the moment of its appearance cannot exactly be predicted. The uncertainty can amount to degrees.

- Even if a star with a declination of 0° were visible at the moment it crosses the horizon, it would not become visible exactly in the east, because of atmospheric refraction. Rather, it would appear slightly north of the east point. What makes this problem even more serious is the fact that the phenomenon was not understood in antiquity and therefore could not be taken into account in calculations.

For these reasons, it is hard to say what exactly the magi could have observed if they had followed Colbert's idea. Also, it is hard to say if they would have dated the event to a particular year and to which one.

Manger, Ass, Ox, and the Constellation of Cancer

The baby Jesus was laid in a manger ($\varphi \alpha \tau v \eta$, *praesepium*) according to Luke. The first explicit mention of an ass and an ox adoring baby Jesus in the manger appears in the apocryphal Gospel of Pseudo-Matthew, which was probably composed around 600 CE:

Tertia autem die nativitatis Domini egressa est Maria de spelunca et ingressa est stabulum et posuit puerum in praesepio, et bos et asinus adoraverunt eum. Tunc adimpletum est quod dictum est per Isaiam prophetam dicentem: "Cognovit bos possessorem suum et asinus praesepe domini sui."

However, on the third day of the birth of the Lord, Mary left the cave and entered a stable and laid the boy in a manger, and the ox and the ass adored him. Then was fulfilled what had been said by the prophet Isaiah: "The ox knew its owner and the ass the manger of its master [however, Israel did not know, my people did not understand]."

(Pseudo-Matthew 14, referring to Isaiah 1:3)

However, the motif of the ass and the ox with the manger is a lot older. One such depiction is found in a relief from 385 CE on the sarcophagus of Stilicho in the church Sant' Ambrogio in Milan. Also, in the apocryphal Gospel of James, which was composed in the 2^{nd} century, the ass appears as Mary's mount, and baby Jesus is laid in an *ox* manger ($\phi \dot{\alpha} \tau \eta \beta o \tilde{\omega} v$, 12,2), in order to hide him from Herod's henchmen.

The German astronomer Arthur Stentzel has pointed out in the second edition of his book *Jesus Christus und sein Stern* that the same motif is also found in the constellation of Cancer, namely in the shape of the *Praesepe* star cluster (Latin *praesepe* = "manger") and two stars in its vicinity that are called the northern and the southern "donkey colts" (*Asellus borealis* and *Asellus australis*). ⁴⁸⁴ The same celestial objects are already mentioned by Pliny the Elder who died during the eruption of Mound Vesuvius in 79 CE:

Sunt in signo Cancri duae stellae parvae, Aselli appellatae, exiguum inter illas spatium obtinente nubecula, quam Praesepia appellant.

In the sign of Cancer, there are two small stars, called the "donkey colts", the small space in between them being occupied by a small cloud that they call "manger". (*Nat. hist.* 18.80.353)

Stentzel believes that these designations of stars can only have come down from Christian sources because earlier authors allegedly did not know them. He therefore believes that the Star of Bethlehem must have stood in this area of the sky when Jesus was born. Furthermore, from his historical considerations he arrives at the conclusion that Jesus must have been born in 12 BCE, when Comet Halley appeared. He therefore believes that the

⁴⁸⁴ Stentzel, Jesus Christus und sein Stern, 1928², pp. 243ff.

Star of Bethlehem was the comet Halley. As a matter of fact, Halley moved through this part of the sky in September 12 BCE. On 6 September, it passed 20° "above" (north of) Praesepe.⁴⁸⁵

As has been stated already, the majority of scholars reject such an early date for the birth of Jesus.⁴⁸⁶ Moreover, it has been shown that the behaviour of this comet in 12 BCE does not accord well with Matthew's description. In addition, Stentzel's assertion that the star cluster M44 was given the name of Praesepe only by Christians is clearly wrong. The Greek astronomer Aratus, who lived in the 3rd century BCE, in his book *Phainomena* already calls it the "manger", using the same Greek word that Luke used, namely *phatnē*:

892 σκέπτεο καὶ φάτνην. ἡ μέν τ' ὀλίγῃ εἰκυĩα
893 ἀχλύϊ βορραίη ὑπὸ Καρκίνῷ ἡγηλάζει:
894 ἀμφὶ δέ μιν δύο λεπτὰ φαεινόμενοι φορέονται
895 ἀστέρες, οὕτε τι πολλὸν ἀπήοροι, οὕτε μάλ' ἐγγύς,
896 ἀλλ' ὅσσον τε μάλιστα πυγούσιον οἰίσασθαι:
897 εἶς μὲν πὰρ βορέαο: νότῷ δ' ἐπικέκλιται ἄλλος.
898 καὶ ταὶ μὲν καλέονται ὄνοι: μέσση δέ τε Φάτνη.
Also watch the Manger. Like a faint
mist, it wanders in the north beneath the Crab.
On both sides of it wander two faintly gleaming
stars, not far apart, nor very near,
but about as much that it is considered a cubit's length,
one of them in the north, the other one inclines to south.
And these are called the two she-asses; but what is in the middle, the manger.

Nevertheless, the manger with the two *donkey colts* (*aselli*) or *she-asses* ($\tau \alpha i$... $\delta v \sigma i$) could have something to do with the manger of Jesus. The constellation of Virgo is also older than Christianity, and still it was associated with the birth of Jesus.

Could the motif of the manger and the animals below the Star of Bethlehem go back to a real astronomical-astrological configuration that took place at the time of Jesus' birth? What kind of configuration could that have been? A heliacal rising of Jupiter near the Praesepe cluster? This can be ruled out. Firstly, Praesepe and the stars around it are so faint that they would not have been visible when a planet made a heliacal rising in their vicinity. Secondly, there were no heliacal risings of planets near Praesepe in those years. In the

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⁴⁸⁵ Calculations by D.K., using the *Swiss Ephemeris* and based on orbital elements published by Yeomans and Kiang for the perihelion passage of Halley in 12 BCE. Stentzel in the first edition of his book dates the birth of Jesus on 17 September, based on information given in the so-called Benan letter, a forged Coptic text that was first published in the year 1911 (Ernst Edler von der Planitz, *Ein Jugendfreund Jesu*). Later, Stentzel learnt that he had fallen victim to a forgery, however, he believed that a birth of Jesus in mid-September was sufficiently supported by other facts.

⁴⁸⁶ vide this author's elaborations on p. 116.
year 4 BCE, Jupiter made his heliacal rising 18° west of Praesepe, in the year 3 BCE 13° east of Praesepe, and in the pre this and following years in different zodiacal constellations. Venus did not make any heliacal rising near Praesepe. Only Mars made one in the year 6 BCE, about 5° west of Praesepe, but Mars has never been considered a candidate for the Star of Bethlehem.

A lot more interesting is the fact that on 26 October 4 BCE, Jupiter made a station only 1.4° from Praesepe and became retrograde. *Thus, the "star" really made a standstill near the manger!* This is really remarkable. However, it occurred four months after the appearance of the "star", i.e. after the heliacal rising of Jupiter, which had taken place on 28 June. This is in conflict with the conclusions drawn in the present work, namely that the star must have been retrograde when it appeared and made a station shortly afterwards. However, since there is no general agreement about this, one may accept Jupiter as a possible candidate. Nevertheless, the question remains as to what exactly made this heliacal rising of Jupiter so special. On the other hand, the prophecy of Daniel rather than astrology may have indicated the time of the birth.

Summary

A great number of authors have written about the Star of Bethlehem and developed varthis explanations of it. In the last few chapters, the following theories have been examined:

– In the 2nd century, church father Origen believed it must have been a comet. Three objections have been made against this solution. Firstly, an analysis of Matthew and other texts has shown that the appearance of the "star", the birth of Jesus, and the arrival of the *magi* must have occurred almost simultanehisly. Consequently, the *magi* must have foreseen the star or calculated it beforehand. However, in Antiquity, astronomers were not able to predict comets. Secondly, it has been pointed out that comets were considered to be indicators of political upheavals and disaster, which does not seem to accord well with Jesus, although Origen argues, and not wrongly, that it was expected that the Messiah would bring a radical world-historical change. Thirdly, there are no records of a suitable comet that would have appeared around the birth year of Jesus. Although Chinese sources mention comets that appeared in the years 5 and 4 BCE, these apparently were not very bright and remarkable. Also, they were not seen "in rising", i.e. at the time of their heliacal rising, as is required by Matthew's description.

– Ignatius of Antioch, a contemporary of Origen, described the "star" in a way that is rather reminiscent of a nova or supernova. Here, again, it must be objected that the *magi* must have foreseen the phenomenon or calculated it beforehand, which was not possible for the then astronomers if the star was a nova. Secondly, phenomena of this kind are *immovable* relative to the sphere of the fixed stars, whereas the Star of Bethlehem was described as "going before" and then "standing still". Some authors have also claimed that the above-mentioned Chinese records that report comets in 5 and 4 BCE could actually refer to novae. However, these sources are about "broom stars", which does not fit a nova. Aside from that, present-day astronomers could not identify any traces of a nova that could have occurred in those years in the area of the sky mentioned in the records. Finally, again, it must be noted that these objects did not appear at the time of their heliacal rising. Similar objections can be made with the vartable star Mira, which has also been proposed as a candidate for the Star of Bethlehem.

- According to the most popular theory, the Star of Bethlehem was the conjunction of Jupiter and Saturn that occurred in the year 7 BCE in Pisces. It has been shown that this solution is not convincing either. Firstly, when two planets pass each other at a distance of two full moon diameters, then this cannot be considered a "star". Secondly, this theory does not accord with the information given by Matthew, i.e. the heliacal rising, the "going before" and the standing still of the star. Thirdly, in the huge text corpus of ancient Greek and Latin astrology there are no testimonies that conjunctions of Jupiter

and Saturn (let alone triple conjunctions of them) were already considered important for world history. This idea was only developed in the early Middle Ages by Sassanian and Arabic astrologers. Furthermore, the latter (e.g. Masha-'allah) did not link Jesus with the conjunction in Pisces in 7 BCE, but with the one in Leo in 26 BCE. Some (e.g. the Jew Bar Hiyya) were of the opinion that the conjunction in 34 CE in Aries indicated the crucifixion and the birth of Christianity. The idea that Jesus was indicated by the conjunction in 7 BCE first appears in the Latin poem *De Vetula*, which pretends to have been composed by Ovid, but was actually written in the 13th century. The idea that this conjunction was the "Star of Bethlehem" first appears in works of the German theologian and historian Friedrich Münter.

- Another popular candidate for the Star of Bethlehem is the spectacular conjunction of Jupiter and Venus in the evening of 17 June 2 BCE, where the two planets seemed to merge completely. Unfortunately, this extremely rare phenomenon does not fit the Star of Bethlehem either, because the merged "star" could not be seen rising in the morning in the eastern sky, but *in the evening in the western sky and before its setting*. Moreover, the merging of the two planets lasted for only a couple of hours, whereas the Star of Bethlehem was observed by the *magi* over a longer period of time. Thirdly, it would be a mystery how this "star" could "go before" and "stand still". Finally yet importantly, ancient astronomers were not able to calculate the merging beforehand.

– Also untenable is M. Molnar's theory, who links the star with a conjunction of Jupiter and the Moon in Aries, based on coins from Antioch that show a lunar crescent and a star above a ram. Firstly, Molnar's interpretation of the star as Jupiter and his assumption that the depiction refers to a historical configuration are mere speculation. Since early Mesopotamian times, the symbol of the crescent and the star stood for a king chosen by the gods, where the star actually was neither Jupiter nor Regulus, but Venus. In Ptolemy's astro-geographical system, Aries was attributed to the Levant. Thus, the depiction could have just symbolised something like "Kingdom of Syria" and have been intended as a reminder of the glorthis history of Antioch, without any reference to an historical configuration. The same holds for the flags of present-day Muslim countries, where the symbol of the crescent with the star often appears. It is only a symbol and does not refer to an historical astronomical observation. Secondly, Molnar's statement that an occultation of Jupiter by the Moon occurred on the nativity date proposed by him (the 17th April 6 BCE) is completely irrelevant. The occultation occurred during the day and could not be observed, let alone calculated. Furthermore, it is known from cuneiform sources that Assyrian astrologers interpreted occultations of Jupiter not as omens indicating the birth of a king but the death of a king in a western country.

- Since it does not make sense to call a conjunction a "star" and since a conjunction cannot "appear", "go before", and "stand still", proponents of con-

junction theories (Ferrari, Martin, Molnar) have suggested that, strictly speaking, the star was Jupiter and that Matthew refers to this planet's heliacal rising, motions, and station. These astronomical processes, which recur in yearly intervals, would have been considered important only because they were accompanied by the said extraordinary conjunctions. However, these conjunctions are a speculative element that does not appear in Matthew's "report". Finally yet importantly, it has been shown that Venus fits the description of Matthew a lot better than Jupiter.

- The theory that the Star of Bethlehem could have been an astrological aspect figure in the shape of a Star of David has also been examined. Here, it must be objected that a prominent configuration of this kind did not occur during the period in which Jesus must have been born. In addition, such an aspect figure would not have fulfilled the conditions set by Matthew, namely that the star had to rise in the east, "go before", and "stand still".

- Finally, the theory proposed by D. M. Murdock has been discussed. Murdock believes that the Star of Bethlehem was Sirius, whose point of rising above the horizon was indicated by the three belt stars of Orion, which among seafarers are known as the "Three Kings". Unfortunately, it is unknown where this traditional name of the belt stars originates from and how old it actually is. It seems to be attested only since the 17th century, and it is hard to believe that it goes back to ancient Egypt, as Murdock believes. It is true that the heliacal rising of Sirius in summer was important to the Egyptians, because it was symbolically linked to the Nile flood and to the beginning of the agricultural year. However, Murdock also wants to link Sirius astronomically with the date of Christmas, i.e. 25 December, which was the date of the winter solstice in antiquity. She argues that on this day, the birth festival of the Egyptian god Horus was celebrated. Also, representations of the goddess Isis with young Horus on her lap are the religio-historical model of Christian representations of the Madonna with the baby Jesus. However, Murdock's astronomical statements do not make much sense. Her assertion that the "Three Kings" in the belt of Orion pointed to Sirius near the winter solstice is irrelevant because it is valid for all seasons where Orion and Sirius can be observed. Neither the heliacal nor the acronychal rising of Sirius occurred near 25 December in the time of Jesus. At best, it can be argued that round the year 1200 BCE, the acronychal rising of Sirius coincided with the winter solstice. However, to this author's knowledge, this fact is not mentioned in extant Egyptian sources. Finally, like the other theories mentioned above, Murdock's theory is not able either to fulfill the conditions set by Matthew that the star had to "go before" and then "stand still".

- According to another theory, *Spica*, the "ear", the brightest star of Virgo, could also have represented the "son" of the "virgin" and therefore could have been the Star of Bethlehem. This idea seems to be supported by the fact that the Bible often associates Jesus with cereal and bread, e.g. in the Parable of the Grain of Wheat in John 12:24 or with the Last Supper in Luke 22:19.

In the 1920s, Arthur Drews noted that in Jesus' time, Spica and Virgo were seen rising above the eastern horizon at midnight on the winter solstice and might have been interpreted as a symbol for the yearly birth of the "new sun". Drews did not believe in the historicity of Jesus, but thought that the story about the Star of Bethlehem was nothing but a winter solstitial myth. Here, it must be objected that according to Matthew the star *appeared* in the east, apparently having been invisible before that. It is evident that only a *heliacal* rising in the morning before sunrise would have been a real *appearance* of a star in the east. By contrast, a star that rose at midnight would also have been visible also on the nights before that, even for several months. Unfortunately, the heliacal rising of Spica fell on a rather insignificant date in the time of Jesus (on 6 Oct. Gregorian). Only circa 1000 BCE would it have fallen on the autumn equinox, a date that played an important part in the ancient Hebrew calendar.

- The American astronomer Elias Colbert believed that the birth of Jesus could have been indicated by Spica as the Star of Bethlehem because, as a result of the precession of the equinox, the star Spica *crossed the celestial equator* approximately in the time of Jesus. The transition of the star from the upper half of the sky to the lower half would have indicated the incarnation. Colbert therefore believes that Matthew had in mind the rising of the star *exactly* at the east point. However, here again, it must be objected that Matthew is talking of the *appearance* of the star, not of its appearance *in the exact east*. An ancient reader who knew about astrology or astronomy and read Matthew would automatically have thought of a heliacal rising. In addition, Colbert's theory probably founders on the problem that ancient methods of astronomical observation and calculation were not good enough to determine the exact year in which the star would have crossed the celestial equator.

- The German astronomer Arthur Stentzel contributed the idea that the Star of Bethlehem must have appeared near the celestial "Manger", thus near the star cluster *Praesepe* and the two stars that are called the "donkey colts" (*Asellus borealis* and *Asellus australis*). Stentzel believed that the Star of Bethlehem was Comet Halley in the year 12 BCE. However, the majority of scholars do not accept such an early date for the birth of Jesus. In addition, the comet was not particularly spectacular in that year. A lot more striking was the fact that Jupiter made a station very close to Praesepe on 26 October 4 BCE. The magi would have observed the star "at its (heliacal) rising" four months earlier on 28 June. However, it has been shown in the present work that Jupiter is not a good candidate for the Star of Bethlehem. Moreover, it is unclear why the magi would have considered this particular appearance of Jupiter to be connected with the birth of the Saviour. On the other hand, the prophecy of Daniel rather than astrology may have indicated the time of the birth.

On the Importance of Venus in Ancient Times

A thorough analysis of Matthew's text has shown that the "Star of the Messiah" could only have been Venus, and that in the opinion of early Christians the birth of Jesus coincided with a heliacal rising of this planet. This result became clear very simply and naturally. The fact that other writers did not reach the same conclusion⁴⁸⁷ is due only to the persistent *prejudice* that the Star of the Messiah must have been a very unusual and incomparable occurrence. The heliacal rising of a planet does not live up to such a perception, especially as it is regularly repeated every one or two years, in the case of Venus every 584 days. However, from the foregoing considerations it is obvious that one does not have to look for a rare or incomparable event. The magi were in fact not following a heavenly omen that indicated the birth of a Saoshyant or the Messiah by virtue of its own symbolism. Instead, they were following a prophecy, most probably the one in Daniel 9:24-27, which already roughly indicated the time when the Messiah would come, without even mentioning a star. The heliacal rising of some star was only an additional condition that also had to be fulfilled and perhaps helped to narrow down the *exact time*. Thus, the star might have been only one of many clues available to the magi, and it probably established the exact time of the birth. Apart from that, it is likely that other things also played a part. Matthew reports that the magi proceeded from Jerusalem to Bethlehem because of an Old Testament prophecy (Micah 5:2). Moreover, he states that they paid heed to their dreams.

Prejudices against Venus as the Star of the Messiah

Most authors who have written about the Star of the Messiah are of the opinion that the symbolism of Venus is not suitable as the Star, or, in the words of David Hughes, it "has no astrological message"⁴⁸⁸. This is a gross error. For Mesopotamian sky gazers the planet Venus, which they associated with the goddess Ishtar, had an important role. Neo-Assyrian kings, such as, for instance, Esarhaddon and Assurbanipal, saw themselves as sons or foster sons of this goddess. In the whole ancient Near East, the Venus goddess under the name of Ishtar, Astarte, Athtart, etc., was one of the greatest deities and played an important role as the kingmaker. Here, it must be remembered that the Christ Child was to become *the king of the Jews*! His mother, Mary, continued the tradition of the great goddess. This aspect shall be examined in more detail shortly.

http://www.scripturescholar.com/VenusStarofBethlehem.htm)

⁴⁸⁷ An exception that will be discussed a little later is Bruce A. Killian. ("Venus, the Star of Bethlehem",

⁴⁸⁸ David Hughes, *The Star of Bethlehem*, p. 135.

Incidentally, Venus is the brightest celestial body after the Sun and the Moon. It is little known, but nevertheless a fact, that Venus is the only planet that can be observed during the day by the naked eye. Of course, she may be very difficult to find in a bright sky, and it helps a lot if the Moon is standing near her and can be used as a pointer to her exact position. In Babylon, the three gods Shamash, Sin, and Ishtar, i.e. the Sun, Moon, and Venus, formed the triad of the greatest astral deities. Thus, it is only logical that the deity of the planet Venus was bestowed with a major role among all astral deities. For this reason, she is also a plausible candidate for the Star of the Messiah.

Hughes himself points out that in ancient times Venus, the morning star, had the role of heralding the morning and the new day, quite unlike today, where the time is read from clocks. As can be seen in various verses in the Old and New Testaments, which shall be investigated shortly, it is precisely here that one of the Star's symbolic meanings lies. Just as the morning star heralds the new day, the Messiah appears as prophet and king of a new kingdom, a new era of truth, and an era of light.

After Venus had completed her period as the evening star in the west, i.e. in the direction that in ancient times was associated with death, her spectacular reappearance as morning star was considered a symbol of *the resurrection* of the dead, a theme that was central not only in the Christian religion, but also in several ancient so-called mystery cults. The west, as the setting direction of all stars, was associated with death, and the east, as the direction of their rising, with birth or rebirth. For example, this is illustrated by the day and night journey of the Egyptian Sun god Ra: He descends into the underworld in the west and is reborn in the east.

The association of Venus with death and resurrection becomes even clearer when we think of the myth of *Inanna*, the Sumerian queen of heaven, and a personification of Venus. Inanna descends to the underworld. There she has to pass through seven gates, and at each of them she has to hand over one of her seven insignia until she finally stands naked before Ereshkigal, the goddess of the underworld, and is killed by her. By means of a trick, performed by the god Enki, she is brought back to life, ascends, receives all her insignia back at the seven gates, and finally appears in the morning sky.

The first rising of Venus especially was in no way a meaningless event, astrologically speaking. It was specifically mentioned in Babylonian horoscopes, provided it happened close to a birth. Besides, it is a quite impressive occurrence. No other celestial body ascends the sky as quickly as Venus does when she appears as the morning star. The reason for this is that she is always retrograde then and very quickly gains distance from the Sun. Her rapidly increasing brightness makes the effect even more noteworthy. Anyone who enjoys observing the sky knows just how spectacular this sight is. And isn't a child born at the time of a first rising of this planet bound to have an outstanding personality?

Venus as a female and male planet

Is Venus too feminine a planet to be identified with the Messiah? Not necessarily. In the Greco-Roman world, Venus is very often referred to using masculine terms such as "morning star" (Greek *heōsphoros*, *phōsphoros*; Latin *lucifer*) or "evening star" (Greek *hesperos*; Latin *vesper*). In ancient Arabia and Ugarit the god of Venus, Athtar (*ttar*), was male. His consort was Athtart (= Astarte = Ishtar). The Mesopotamian goddess Ishtar-Inanna liked to dress as a man, wore a beard, and went to war as a field commander leading an army. In the Old Testament, the morning star is called *hēlēl bænšāḥar* in Hebrew, "shining son of dawn" (Isa. 14:12). Its Greek version, the Septuagint, refers to it several times under the masculine name *heōsphoros*, and the New Testament calls it *phōsphoros* and *astēr prōinos*, which are also masculine.⁴⁸⁹ In ancient times, attributing gender to the planets was not so distinct as it may seem to modern readers.

The same was true in astrology. According to the teachings of the astrologers Ptolemy (2^{nd} century CE) and Hephaestion of Thebes, planets assume more masculine or feminine qualities depending on their position relative to the horizon:

άρρενοῦσθαι δέ φασι τοὺς ἀστέρας καὶ θηλύνεσθαι παρά τε τοὺς πρὸς τὸν ἥλιον σχηματισμούς· ἑῷους μὲν γὰρ ὄντας καὶ προηγουμένους ἀρρενοῦσθαι, ἑσπερίους δὲ καὶ ἑπομένους θηλύνεσθαι. καὶ ἔτι παρὰ τοὺς πρὸς τὸν ὁρίζοντα· ἐν μὲν γὰρ τοῖς ἀπὸ ἀνατολῆς μέχρι μεσουρανήσεως, ἢ καὶ ἀπὸ δύσεως μέχρι τῆς ὑπὸ γῆν ἀντιμεσουρανήσεως σχηματισμοῖς, ὡς ἀπηλιωτικοὺς ἀρρενοῦσθαι· ἐν δὲ τοῖς λοιποῖς δυσὶ τεταρτημορίοις ὡς λιβυκοὺς θηλύνεσθαι.

They say that the stars become masculine or feminine according to their positions relative to the sun, for when they are morning stars and precede the sun, they become masculine; however, feminine when they are evening stars and follow [the sun]. Furthermore, [they become male or female] according to [their positions] with respect to the horizon; for when they are in positions from the rising to midheaven, or again from the setting to lower mid-heaven, they become masculine because they are eastern; however, in the other two quadrants, as western stars, they become feminine.⁴⁹⁰

According to this, the heliacally rising Venus would even have been *masculine in two respects*.

In addition, the gender of heavenly bodies is usually strongly influenced by culture. In the English language the Sun, the Moon, and the planets have no grammatical gender, but in other languages they often do. In Romance languages and in Greek, for instance, the Sun is masculine and the is Moon feminine. However, in German and in Arabic, the Sun is feminine and the

⁴⁸⁹ More information about planets in the Bible is given on pp. 103ff.

⁴⁹⁰ Ptolemy, *Tetrabiblos* I,6.

Moon masculine. This latter gender distribution of the Sun and the Moon could be explained by the fact that the social structures of Germanic and Arab tribes before Muhammad were originally matrilinear. In Indian astrology, all planets have masculine names. The planet Venus is called *śukra*, which means "the bright one" (masculine).

Venus in Hellenistic Astrology

Molnar is of the opinion that the astrology that guided the Magi must have been the same as that which is known from ancient Greek and Latin writings. If this were so, Greco-Egyptian authors like Claudius Ptolemy, Vettius Valens, and Paulus Alexandrinus would be able to give detailed information about the astrological beliefs of the Magi. However, it is not so simple. The astrological theories of ancient Greek and Latin authors differ in many respects. In addition, the Jews and the Mesopotamians brought their own ideas to astrology, and these ideas are not necessarily found in the works of Greco-Egyptian or Latin authors.

In Mesopotamia the Venus goddess Ishtar represented the attributes of sexuality, fruitfulness, and war. In addition, she was "responsible" for the appointment of kings. By contrast, in the Greek and Roman world Ishtar was identified with Aphrodite-Venus, and her planet was given this name. The close link to war and a royal reign, which characterised Ishtar, was missing with Aphrodite.⁴⁹¹ This seems to have contributed to a changed *astrological* interpretation of Venus.

In Hellenistic astrology Venus was the planet of harmony and love. This accords well with Jesus' message of *love*. Although one cannot equate the love of the goddess Aphrodite-Venus with Christian love, one has to take into consideration that the astrological Venus has wider significance than merely erotic and sexual love. Vettius Valens, contemporary of Ptolemy, in interpreting Venus, writes the following:

Ή δὲ Ἀφροδίτη ἐστὶ μὲν

- ἐπιθυμία καὶ ἔρως, σημαίνει δὲ μητέρα καὶ τροφόν.
- ποιεῖ δὲ ἱερωσύνας, γυμνασιαρχίας,
- χρυσοφορίας, στεμματηφορίας,
- εὐφροσύνας, φιλίας, ὁμιλίας,
- ἐπικτήσεις ὑπαρχόντων, ἀγορασμοὺς κόσμου,
- συναλλαγὰς ἐπὶ τὸ ἀγαθόν, γάμους, τέχνας καθαρίους,
- εὐφωνίας, μουσουργίας, ἡδυμελείας, εὐμορφίας, ζωγραφίας,
- χρωμάτων κράσεις καὶ ποικιλτικήν, πορφυροβαφίαν καὶ μυρεψικήν,
- τούς τε τούτων προπάτορας η και κυρίους, τέχνας η ἐμπορικὰς ἐργασίας
 σμαράγδου τε και λιθείας, ἐλεφαντουργίας.

⁴⁹¹ Except perhaps in archaic times, since Aphrodite played a key role in the Trojan War.

Aphrodite (Venus) is

- desire and erotic love, and is significant for the mother and nurse.

- It makes for priestly rites, the office of gymnasiarch, (i.e. the chief of the gymnasium, D.K.),

- the wearing of gold ornaments, the wearing of crowns,
- merriment, friendships, companionships,
- further acquisition of belongings, purchases of ornament,
- reconciliations for the good, weddings, purification arts,
- euphonies, making music, sweetness of melody, beauty of form, paintings, combinations and variety of colours, purple-dying and aromatic arts,
- both the founders and the authors of these things, the arts or commercial
- workshops of emeralds and precious stones, ivory-working.492

This enumeration can be summarised as follows: Venus stands for love in its widest sense, for religious rites and purity, for gold and other jewellery as well as crowns, and for every kind of fine art, indeed, for harmony in its widest sense. Some of these features match Jesus very well. However, the differences from the Mesopotamian Ishtar are evident. The link between the planet and war and royal reign has been lost except, possibly, for the "wearing of crowns". The heliacal rising of Venus would not necessarily indicate the birth of a king in Hellenistic astrology. However, it will be seen that Jewish and Mesopotamian teachings play a very important part here.

As some authors prefer Jupiter as a candidate for the Star of Bethlehem and as they take Jupiter to be *the* "royal planet", the question arises: How is Jupiter really interpreted in ancient astrological texts? It turns out that those authors are mistaken in favouring this planet over Venus. For example, Vettius Valens associates Jupiter with propagation and erotic love, with riches and influence, with "command, government, prestige, priesthood" ($\dot{\alpha}$ ρχ $\dot{\alpha}$ ς, πολιτεί α ς, δόξ α ς, προστασί α ς iερ $\tilde{\omega}$ v) and so on.⁴⁹³ Although this may include kingship, that is not expressly stated. Besides, Venus can assume similar meanings. For instance, Paulus Alexandrinus states that Venus, when she is in culmination during her evening star phase, brings into being "high priests, councillors, rulers, crown-wearers, excellent persons" (νεωκόρους, βουλευτ $\dot{\alpha}$ ς, πρυτ $\dot{\alpha}$ νεις, στεφανηφόρους, διασήμους). While Jupiter in the same positions could also indicate excellent persons, they do not automatically occupy a leading position in government.⁴⁹⁴

⁴⁹² Vettius Valens, *Anthology*, I,1; translation by Robert Schmidt.

⁴⁹³ Vettius Valens, loc. cit.

⁴⁹⁴ Paulus Alexandrinus, *Eisagogika*, 24. In Schmidt's translation on p. 53f.

Venus in Babylonian Astrology

It seems that the system of individual natal horoscopy was largely developed in Hellenistic and Roman Egypt and Greece. Although individual horoscopes first appear around 500 BCE in Mesopotamia, almost nothing is known about how a Babylonian astrologer interpreted a natal horoscope. Only a few Cuneiform horoscopes are extant, and for the present investigation about the importance of Venus in Mesopotamian astrology, they are, unfortunately, completely useless. They merely include information on where the planets were positioned at the time of the birth. Some also indicate information about heliacal risings or settings that occurred close to the birth. However, practically no information is given about the way in which these horoscopes were interpreted. Detailed information about the significance of planets, the zodiac, aspects and so on is only found in Greek and Latin texts from Hellenistic and Roman Egypt, Greece and Rome. They shall be discussed later.

Babylonian birth horoscopes did not appear out of nowhere. Their invention around 500 BCE was the result of a long development culminating in an important achievement just at this time—the ability to *calculate* positions of planets at any point in time, whether future or past, and to construct almanacs and ephemerides. Not until these advances were made was it possible to cast a birth horoscope for anyone who knew their date of birth. Earlier Babylonian astrology concentrated on *currently observable* heavenly omens; it was not interested in the fate of individual people, only in that of *the king and the country*. If these celestial omens were inauspicious, they tried to persuade the gods to change their minds by so-called apotropaic rituals (*namburbû*) and prayers.

Many sources of this older Mesopotamian astrology are extant. The most important is the text *Enūma Anu Enlil*, which was composed after 1400 BCE, but in parts is based on older sources. In addition to lunar, solar, planetary, and star phenomena, other celestial omens that were relevant to interpretations were clouds, lightning, storms, winds, floods, and earthquakes. In fact, anything occurring between earth and heaven could be interpreted as a sign of the will of the gods. Apart from the Sun and the Moon, Venus was the most important celestial body in astronomy. Heliacal risings and settings, stations and retrograde motion as well as the calendar dates on which these planetary events occurred were subject to investigation. Some texts refer to the luminosity of planets, haloes, and encounters with other celestial bodies.

However, what precisely was the significance of Venus? A fully accurate and simple answer is difficult. There are no sources giving information about the "essence" of each of the heavenly bodies. The texts only state what *concrete* consequences follow *concrete* occurrences in the heavenly realm. An example from the Venus Tablet of King Ammişaduqa of Babylon (17th or 16th cent. BCE), may give an impression of it:

šumma [ina] ^{ITI}Šabāți ūmi 15 ^dNinsianna ina ereb ^dŠamši itbal 3 ūmī ina šamê uhharamma ina ^{ITI}Šabāți ūmi 18 ^dNinsianna ina șīt ^dŠamši innamir nagbū ippațțarū ^dAdad zunnīšu ^dEa nagbīšu ubbala šarru ana šarri salīma išappar

When Venus disappears at sunset on the 15th of Šabātu, remains invisible in the sky for three days and returns at sunrise on the 18th of Šabātu: The spring waters will be unleashed, Adad (the god of heavenly water; D.K.) will bring his rains, and Ea (the god of subterranean water; D.K.) will bring his spring waters. One king will send messages of reconciliation to another one.

šumma ina ^{ITI}Arahsamna ūmi 11 ^dNinsianna ina sīt ^dŠamši itbal 2 arhī 8 ūmī (var. 7 ūmī) ina šamê uhharamma ina ^{ITI}Țebēti ūmi 19 ^dNinsianna ina ereb ^dŠamši innamir ebūr māti iššir

When Venus disappears at sunrise on the 11th of Araḥsamna, remains invisible in the sky for two months and eight days (var. seven days), and reappears at sunset on the 19th of Tebētu: The country's harvest will be plentiful.⁴⁹⁵

It is difficult to clearly delineate the responsibilities of planet-gods. All heavenly phenomena were believed to indicate future auspicious or inauspicious occurrences concerning the king, the country, the fields and the animals. Mars (Nergal) may have been more closely linked to epidemics, war and death, and Jupiter (Marduk) may have represented the king to a certain extent. However, these are mere tendencies, and for Venus, the Sun and the Moon a similar thematic delineation is problematic. Amongst heavenly omens, Venus (Ishtar) has a very wide spectrum of significance. On the one hand, she represents fruitfulness of plants, animals, and man. On the other hand she was the goddess of war and peace and royal reign. The king was seen as her lover or her son. If she loved him, all was well in the land; if she did not love him or loved another one, he would perish and the country collapse. The king was largely identified with the country, the fate of the king with the fate of the country. Therefore, a Venus omen could indicate that the fields would bear good harvests or that a famine was imminent, that there would be war or peace, wailing or rejoicing in the country, that it was the king's fate to receive a blessing or to be harmed.

The following astrological prognosis from Assyria relates to a heliacal rising of Venus:

⁴⁹⁵ EAE LXIII, 1f., Transcription and translation by D.K., according to: Reiner/ Pingree, *Enūma Anu Enlil Tablet 63: The Venus Tablet of Ammişaduqa*, p. 29.

(ol) 存 带 또 序 案 示 承 示 承 示 (o) 店 玉 备 示 之 ミョン 正時 山 町 (5) 区 参 西 玉 五 (0) 子 了 冬 平 矿 唐 唐 市 40 🐘 🦉 👘 水 王 子 50 🐘 用用下(8)和可用下、场」 (1) 「 それ 7 ~ キ 前 ミス エヌ ちぎ (2) 女 下 冬 正辞 冬 て 原実 下 冬 ③「 FF F FF F ▲ 街 店 工 町 ▲ F (4)店群 ※ 云山豆下(5)周144场库 ^(o1) mīnu ra'āmu anniu ⁽²⁾ ša ^dIštar ana šarri belīya ⁽³⁾ [t]ara''amūni (4) damqu ša adanniš ana šarri belīya ⁽⁵⁾ [tašpu]ranni ⁽⁶⁾ [^ddilbat manz]āssa tusallim ⁽⁷⁾ [xxxx] arhiš tattammar ⁽⁸⁾ [damqu ša šarri] u palûšu $^{(rl)}$ [šumma ^ddilb]at manzāssa urrik $^{(2)}$ [$\bar{u}m$] \bar{u} šarri ark \bar{u} ⁽³⁾šumma [^ddilb]at kakkabša ihrumma innamir ⁽⁴⁾šar māti balāta urrak What love is this, which Ishtar loves the king, my lord? [What] benefit [is this], which she has [se]nt to the king, my lord, in plenty?

[Venus] made her [posi]tion peaceful, [– this is the love for the king]. She became visible in time – [this is the benefit for the king] and the time of his rule.

If Venus has made her position long-lasting, [then] the days of the king are long-lasting.

If the star of [Ven]us is early and becomes visible, [then] the king of the country makes [his] life long-lasting.⁴⁹⁶

This probably means that if Venus makes her heliacal rising rather early and thereby prolongs her presence as morning star, then this is an auspicious omen for the king and his reign. The clear identification of Venus with the goddess Ishtar and the analogy of the "long-lasting position" of Venus and the "long life" of the king text are interesting. Venus obviously appears as the planet of the king and the kingmaker. The Star of Bethlehem could therefore very well have been Venus, because it indicated the birth of a king.

⁴⁹⁶ Transcription and translation by D.K., according to RMA 247, in: Hunger, *Astrological Reports to Assyrian Kings*, p. 16, No. 27. The clay tablet is broken. Text in [] brackets has been conjectured and is partly uncertain.

Venus-Ishtar and the "Mother of God"

The association of the goddess Ishtar with kingship is very ancient. The Venus-goddess, together with Sin and Shamash, the gods of the Moon and the Sun, constitute a triad under whose protection the mortal king stood. A hymn of Iddin-Dagan, king of Isin at the beginning of the 2nd millennium, describes that on a New Year's Day, the king celebrated the Sacred Marriage with the goddess in the glow of the shining evening star. During this ceremony, the goddess appointed him king and declared a propitious destiny for him.⁴⁹⁷ This would have been the evening of a new moon. At the time, the Sun, the Moon, and Venus were in "conjunction" with one another. A related motif also appears in the myth of the descent of Ishtar into the Netherworld. When she rises from the Netherworld as the morning star, she decrees the fate of her husband, the shepherd king Dumuzi-Tammuz, however, in this case his death.

Mesopotamian kings saw themselves as chosen "husbands" of the goddess Inanna-Ishtar or, alternatively, as her "sons". Those who found favour with the goddess became kings. Those who lost her favour were stripped of power, and were generally killed. Myths and royal hymns from the beginning of the 2nd century BCE show that the kings of Uruk such as Gilgamesh understood themselves to be lovers of the goddess, exactly like the kings of Ur and the kings of Isin such as Shulgi and Iddin-dagan. The goddess Inanna-Ishtar was identified with Venus and was revered as this planet. In the cities just mentioned, a ritual of the Sacred Marriage, a sexual union between the king and the goddess, or a representative of the goddess, was enceed during this period. Even in Hellenistic times this ritual is documented for Uruk.⁴⁹⁸ The celebration was held at the new moon in spring, and always in the evening, so that Venus, if visible, was not the morning but the evening star.⁴⁹⁹ As has been mentioned already, it is precisely this conjunction of crescent moon and Venus that is found even nowadays on the flags of many Muslim kingdoms and states. It is the symbol of divinely legitimised royal rule.500

⁴⁹⁸ Linssen, *The Cults of Uruk and Babylon*, p. 184/188, in text TU 39 (AO6459), 1.4.

⁴⁹⁷ The Sumerian text and a translation are available on the Internet in the *Electronic Text Corpus of Sumerian Literature*, http://etcsl.orient.ox.ac.uk/, text 2.5.3.1.

 $^{^{499}}$ This can be inferred from the hymn mentioned above of king Iddin-Dagan of Isin (20th century BCE).

⁵⁰⁰ The Turks are in the habit of hanging their flag vertically in such a way that the motive of the crescent moon and star appears upside-down, i.e. the star is below the crescent, and the crescent is pointing downward. The conjunction cannot be seen in the sky in this way.

However, as previously indicated, Neo-Assyrian kings saw themselves less as husbands but rather as *sons* of the goddess. In the oracle-dream of a priest of Assurbanipal, the goddess Mullissu—the wife of the Assyrian state god Aššur, who was identified with Ishtar—says:

(m) 其 L H H F H H H H H H H H 《省平玉 臣 丢 臣 祈 西 奉 宝 ▲ 片打 (9) 单序中国社区 ♥月111111~2011年月11月月11 भंतम (11) 耳底 鱼 鱼 鱼 鸟 鸟 鸟 鸟 鱼 鱼 鱼 鱼 鱼 鱼 鱼 鱼 鱼 鱼 *~ * ^(r 6) mā ša ^dMullissu ummišuni lā tapallah ša bēlet arba'il tārīssuni lā tapallah ⁽⁷⁾ mā kī tārīti ina muhhi giššiva anaššika ⁽⁸⁾ mā armannu ina birit tulîya ašakkanka ⁽⁹⁾ ša mūšiva êrāk(u) anşarka ša kal ūmī hilpaka addan (10) ša kallāmāri unnānīka usur usur uppaška ⁽¹¹⁾ mā attā lā tapallah mūrī ša anāku urabbūni ^(r 6) [Assurbanipal,] whose mother is Mullissu, do not be afraid. [You,] whose nurse is the Mistress of Arbela⁵⁰¹, do not be afraid. ⁽⁷⁾ Like a nurse, I shall carry you above my hip. ⁽⁸⁾ [As if it were] an apricot tree, I shall put you between my breasts. ⁽⁹⁾ In my nights, I was awake and watched over you. All days, I gave your milk [to you]. ⁽¹⁰⁾ Every early morning, I had you perform the "watch, watch your prayers!".⁵⁰²

⁽¹¹⁾ You should not be afraid, my calf which I have reared.⁵⁰³

Thus, Assurbanipal considers himself to be the son of the highest goddess Mullissu and a foster child of Ishtar of Arbela. In another text, he even asserts:

⁵⁰¹ The mistress of the city of Arbela (present-day Erbil in northern Iraq) is Ishtar.

⁵⁰² The exact meaning of this line is unknown.

⁵⁰³Transcription and translation by D. K., according to: Parpola, *Assyrian Prophecies*, SAA IX, p. 38, r.6-11.

(013)全带电电子子 ~ 随机、风气~~ 电压 (14)圆牙管钉带正式下参取下参驾运客马 (23)下」「「「「「「「「「「「「「」」」」」」。 (*14) 玉 作 巧 陌 竹 郎 下 子 玉 玉 玉 (15) 因 省 五田 正祥 < 五田 日本 二田 日本 二田 日本 (16)玉玉作互开上口和云画 **承兄 【 予 近 町 町 一 「 冬** ^(o 13) ul īde abī u ummī ina burkī ^dištarātiya arbâ anāku ⁽¹⁴⁾ ittarrūnimma ilū rabûtu kīma la'ê (15) imni u šumēli ittallakū ittiva ... ⁽²³⁾ [anāku] ^mAššur-bāni-apli bīnût qātī ilī rabûti ... ^(r 14) dbēlet-^{URU}Ninâ ummu ālittiya ⁽¹⁵⁾ tašruka šarrūtu ša la šanāni (16) dbēlet-^{URU}Arba'il bānîtiya taqbâ balāta dārâti ⁽¹⁷⁾ išīma šīmāti bēlūt kal dadmī epēši (18) šarrānišunu ušakniša šēpūva ^(0 13) I have known neither father nor mother. *I* grew up on the laps of my goddesses.

⁽¹⁴⁾ The great gods led me as a child,

⁽¹⁵⁾ they walked on my right side and on my left side. ...

⁽²³⁾ I am Assurbanipal, creation of the hands of the great gods. ...

^(r 14) The mistress of Nineveh, the mother who gave birth to me,^{504 (15)} bestowed kingship on me which is without equal.

⁽¹⁶⁾ The mistress of Arbela, who formed me,⁵⁰⁵

assigned long-lasting life to me.

⁽¹⁷⁾ She decreed as my fate to establish rulership over all inhabited countries

⁽¹⁸⁾ and made their kings prostrate at my feet.⁵⁰⁶

Assurbanipal's father Asarhaddon had a similar relationship with the goddess. In an oracle, she addresses him as follows:

⁵⁰⁴ The genitive *ālittīya* is actually a problem. Strictly taken, one would have to translate: "The Mistress of Nineveh, i.e. of the mother who gave birth to me", where Nineveh would be the "mother" of Assurbanipal. However, experts such as Alasdair Livingstone and Barbara Nevling Porter are of the opinion that *the goddess* is addressed as the mother of Assurbanipal, which does make good sense because of the first line of the citation.

⁵⁰⁵ The genitive *bānītīya* has a similar problem. It should actually be rendered: "The Mistress of Arbela, (the city) that formed (i.e. made) me…".

⁵⁰⁶ Transcription and translation by D. K., according to: Livingstone, *Court Poetry and Literary Miscellanea*, p. 12f.

Is there a connection with the birth star of Jesus? Jesus is also a new-born king. So, does the star represent a divine mother and kingmaker? Since Mary is associated with the morning star in Catholic tradition, the question arises whether the image of the Madonna with the baby Jesus could not also go back to the model of the relationship between the Assyrian king and the goddess. Another model often mentioned in religio-historical works is the Egyptian goddess Isis with little Horus.

There is also another interesting analogy between Matthew and Assyrian texts of this kind. The Venus goddess "goes before" the Assyrian king protecting him when he goes to war. This is reminiscent of the star that "goes before" the *magi*. The analogy becomes even more striking when it is taken into account that according to some traditional interpretation, the *magi* were actually *kings*. An oracle for Asarhaddon reads as follows:

⁵⁰⁷ SAA IX, S. 6, ii 32'f.

⁵⁰⁸ SAA IX, S. 18, iii 26'-32'.

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^(0 i 4') 「 ⊢ ᄺ ᄿ ⊢ 追羅 న న ⁽⁵⁾ 泊 留 乐 耳 (18) 〒玉玉玉 山 玉 山 石 千 (19) 玉 石 (13) (13) (13) (13) (13) 「」」(II)王自西百百年王。 "" (25) 岳军下当还永示(20) 王运行之前、1 (27) 下出 时 日 日 日 月 月 ^(4') [^maššur-aha]-iddina šar mātāti (5) [lā t]apallah ... (18') anāku dištar ša ^{URU}arba'il (19) nakarūtika ukāsa (20) addanakka... anāku $^{(21)}$ dištar ša $^{\text{URU}}$ arba'il $^{(22)}$ ina pānâtūka $^{(23)}$ ina kutallika $^{(24)}$ allaka lā tapallah (25) attā ina libbi muggi (26) anāku libbi ū'a ⁽²⁷⁾ atabbi uššab ^(4') [Asarhad]don, king of the countries, ⁽⁵⁾ do not be afraid! ... ⁽¹⁸⁾ I am Ishtar of Arbela. ⁽¹⁹⁾ I have flayed your enemies, ⁽²⁰⁾ I have handed them over to you. I am ⁽²¹⁾ Ishtar of Arbela. ⁽²²⁻²⁴⁾ I go before you and behind you: do not be afraid! ⁽²⁵⁾ [If] you are cramped in your heart, ⁽²⁶⁾ I have woe in my heart.⁵⁰⁹ ⁽²⁷⁾ I shall stand up and sit down (or: dwell).⁵¹⁰ In a Sumerian hymn of king Šulgi of Ur (21st cent. BCE, it says: (42) nin su₃-ra₂-aĝ₂ an-na (43) hi-li saĝ gig₂-ga (44) munus šul-la ama-ni-ra dirig-ga (45) a-a-ni me ba-a (46) ^dinana dumu ^dsuen-na-ke₄ (47) šul-gi dumu ^dnin-sumun₂-ka-ra (48) nam mu-ni-ib₂-tar-re (49) me₃-a igi-še₃ ĝen-zu ĝe₂₆-me-en₃

(50) šen-šen-na kuš₇-gin₇ tukul la₂-zu-me-en₃

(51) unken-na ka-mud-ĝal₂-zu-me-en₃

(52) har-ra-an-na zi-šag₄-ĝal₂-zu ĝe₂₆-me-en

⁵⁰⁹ Pritchard's translation of this sentence: "You are in a state of rebirth: I am in a state of woe", is not tenable in this author's view. (Pritchard, Ancient Near Eastern Texts Relating to the Old Testament, p. 449)

⁵¹⁰ Transcription and translation by D. K., according to Parpola, Assyrian Prophecies, SAA IX, S. 4f., I.18'-27'.

(42) The shining mistress of heaven, (43) the joy of the black-headed (i.e. all human beings),

(44) the young woman who surpasses her mother, (45) to whom her father bestowed the *powers of existence* (me),

(46) Inanna, the daughter of Suen (: the Moon god),

(47/48) has decreed a fate for Šulgi, the son of Ninsumun:

(49) In battle, I am the one who goes before you,

(50) In the fights, I am the one who carries the weapon for you like a servant.

(51) In the assembly, I am the one who speaks for you.

(52) On the way, I am the one who protects your life (? or: who gives you courage). 511

The connection of the Venus-goddess with royal rule reinforces the notion that the story of the Star of the Messiah could only have served to legitimise Jesus' claim to being the Messiah or the king of the Jews.

A similar motif is also found in the Old Testament, where a star or an angel of god goes before Israel:

20 הַנָּה אָנֹכִי שׁׁלֹח מַלְאָד לְפָנֶידּ לֹשְׁמֶרְה בַּדָּרֶה וְלַהְבִיאָד אֶל־הַמָּלום אֲשֶׁר הָכָנֹתִי: 21 הַשְׁמֶר מִפְנֵיו וּשְׁמֵע בְּלָלו אַל־תַּמֵר בָּוֹ כֵּי לָא יִשָּׂא לְפִשְׁצֵכֶם כֵּי שְׁמֵי הְכָנֹתִי: 21 הַשְׁמֶר מִפְנֵיו וּשְׁמֵע בְּלָלו אַל־תַּמֵר בָּוֹ כֵּי לָא יִשָּׁא לְפִשְׁצֵכֶם כֵּי שְׁמֵי בְּלָלו אַל־תַמֵר בָּוֹ כֵּי לָא יִשָּא לְפִשְׁצֵכֶם כֵּי שְׁמֵי בְּלָלו אַל־תַמֵר בָּלֹן אַל־תַמֵר בָּלָלו אַל־תַמֵר בָּוֹ כֵּי לָא יִשָּא לְפִשְׁצֵכֶם כֵּי שְׁמֵי בְּלָלו אַל־תַמֵר בָּלֹן אַל־תַמֵר בָּלֹז אַל־תַמֵר בָּוֹ כַּי אָזי בַר וְאַיַבְהוּ אָביר אָדַבֶר וְאַיַבְתוּ אָת־אַיְבֶיוּד וְזַנְשְׁית בָּלוֹ וְעָשִׁית כָּל אֲשֶׁר אַדַבֶר וְאָיַבְתוּ אָת־אַיְכָידְ וְאַבְרָהוּ וְעַהוּיוּים בּיוּבוּ גַיבַר וְאַיַבְתוּ אָהיה וְעָבוּיה וְזַתוּים בּרְרָהוּ וְהַתוּאַיר הַיָּבוּר וְהַתוּים בּיוּבוּים וּצַרְהָי אָת־צַרְרֵידָ: 23 בִּי אַכוּר מַלָּאָבי לְפָנִידּ מָלָאָר לְפָעָאַבָיה וְזַרְהָיוּים וּצַרְהָי וַבוּר הַזַר הַיּבְרוּין וּהַיּמַי בָּלָאָר וְזַבּרוּן וּזַרְהָיוּים בּרוּזין וּאַר הַיּבָרין בּיוּד הַיּאָר אַדַבֶר ווּאַיַכון הַבּדָרָהין בּרוּבוּין וּשָרוּמָמון בּיוּשָר וּזוּר הַיוּר הַשָּעַר בּקוּנוּוּים בּעוּין הַיוּאַר הַמָרוּה בּיוּר הַיּשָּים בּיאָר שָּעָר אַדַבָר ווּאַיר אַיבוּר הַיּרָשָּים בּיאָר בּעוּים בּעוּין הַיוּחַית בּרוּר בּוּרָר הַיּשָּר בּאָר בּעוּים בּיוּין בּעוּין בּרוּה ה וְצַרְהָי אָרוּה בּוּרָהוּי בּרוּהי בּעריה בּיוּרוּין בּייוּים בּיוּה בּיוּר בּיוּה בּיוּים בּיוּים בּיוּה בּיוּה בּיוּר בּיוּים בּיוּים בּיוּה בּיוּה בּיוּין בּיוּים בּיוּרָי בּיוּר בּיוּרָין בּיוּר ביוּין בּיוּין בּיוּין בּיוּים בּיוּה בּיוּה בּיוּרָי שוּיים בּיוּאָר בּיוּין בּיוּים בּיוּר בּיוּרָין אַיר בּיאָר אַיוּין בעוּר בּיוּין בּיוּין בּיוּין בּעוּיים בּעוּיין בּעוּיין בּיוּר בּיוּר ביוּין בּיוּיי אַייישוּין בּייוּין בּייוּיין בּיין בּיוּייין בּיאָר בעוּיים בּיוּיין בּיוּיין בּיוּי ווּבּרּרוּין בּייוּין בּייוּשָּריין בּייריין בּייין בייוּייין בּייוּייין בּייויין בּיייייישוּיין בּיייוּין בּייי הַירוּיין בּייוּיייין בּייוּייין בּיייין בּיין בּייין בּייוּיין בּיייין בּייייין בּייוּיייין בּייייייין בּיייי בייוּיין ב

(20) Behold, *I send an angel before you*, to keep you by the way, and to bring you into the place which I have prepared. (21) Pay attention to him, and listen to his voice. Don't provoke him, for he will not pardon your disobedience, for my name is in him. (22) But if you indeed listen to his voice, and do all that I speak, then I will be an enemy to your enemies, and an adversary to your adversaries. (23) For *my angel shall go before you*, and bring you in to the Amorite, the Hittite, the Perizzite, the Canaanite, the Hivite, and the Jebusite; and I will cut them off. (Exodus 23:20-23, World English Bible)

It will be shown later (pp. 274ff.) that this angel is very likely the morning star.

Speaking to the Persian king Cyrus, the liberator of Israel, Yahweh chooses quite similar words:

⁵¹¹ Translation D.K. Sumerian text: http://etcsl.orinst.ox.ac.uk/cgi-bin/etcsl.cgi? text=c.2.4.2.24&display=Crit&charenc=gcirc&lineid=c24224.42#c24224.42 .

ל כה־אמר יהוה ל**משיחו** לכורש אשר־הַחַזַקתִּי בִימִינו לרָד־לפניו גוּיִם וּמתנֵי 1 מְלָכִים אָפַתָּחַ לְפָתֹה לְפַנֵיו דְלַתַיִם וּשִׁעַרִים לֹא יִסָּגֶרוּ: 2 א**ָנִי לְפָנֵידָ אָלָ**דָ והָדוּרִים אַיַשׁר דַּלְתות נְחוּשָׁה אַשׁבֶר וּבְרִיחֵי בַרְזֵל אַגַדַעַ: 3 ונַתַתִּי לְדָ אוֹצְרוֹת דוֹשֶׁךְ וּמַטְמָנֵי מָסְתַּרִים לְמַעַן תֵּדַע כִּי־אַנִי יְהוָה הַקּוֹרֵא בְשִׁמְךָ אֵלֹהֵי יִשְׂרָאֵל: ⁽¹⁾ Yahweh says to his anointed, to Cyrus, whose right hand I have held, to subdue nations before him, and strip kings of their armor; to open the doors before him, and the gates shall not be shut: ⁽²⁾ "I will go before you, and make the rough places smooth. I will break the doors of brass in pieces, and cut apart the bars of iron. ⁽³⁾ I will give you the treasures of darkness, and hidden riches of secret places, that you may know that it is I, Yahweh, who call you by your name, even the God of Israel. (Isaiah 45:1-3; World English Bible)

While in Mesopotamia it is the *goddess* who goes before the king and is identified with the planet Venus, it seems that in the Old Testament the "angel of Yahweh" is filling the same role. In the New Testament, however, *Jesus* is the morning star.

Interestingly, as has been stated already, Christian traditions mostly venerate *the Virgin Mary as the morning star, not Jesus*. That the morning star was already very early identified with a female character is evident from apocryphal texts. In the "Book of Adam and Eve", an Ethiopian apocryphon from the $5^{th}/6^{th}$ century, it says:

And when He was born at Bethlehem [in] the land of Judah, a star in the East made it known, and was seen by the Magi. That star shone in heaven, amid all other stars: *it flashed and was like the face of a woman*, a young virgin, sitting among the stars, flashing, as it were carrying a little child of beautiful countenance. From the beauty of His looks, both heaven and earth shone, and were filled with His beauty and light above and below; and that child was on the virgin woman's arms; and there was a cloud of light around the child's head, like a crown.⁵¹²

Another example is found in the Syriac apocryphon "The Cave of Treasures", which was allegedly written by the Syrian Saint Ephrem $(4^{th}$ cent.). It states:

⁵¹² Malan, *The Book of Adam and Eve*, IV,14, p. 204 (203-207). Cf. Cumont/Bidez, *Les Mages hellénisés* II, pp. 123ff.. Ethiopian text in: Ernst Trumpp, *Der Kampf Adams*, pp. 167f.

דים סדד גדי דינאילד דשיטיא באואם שנים אולעו, לחום בהביא לדיגהשאי. עום חסים לחי גדי לבהביא בוסטיא דשריאי דרינחי בנהחואי דעואח שליד דין בלחים בהביא יילליא בגרוח בד לבעיא לליא וסטיד א גאי בושח.

Two years before the Messiah was born, the star appeared to the magi; and they saw a star at the vault of heaven that was brighter in light, and whose appearance was greater, than all stars. And inside it was a virgin who held a boy; and a crown was laid on his head.⁵¹³

The interpretation of Venus as the goddess Ishtar, whose lover or son is the king of a world empire, has had its influence in the Orthodox and Catholic cult of Mary. Here, quite clearly, it is not Jesus who is the morning star, but Mary.

In the 12th century, Bernhard of Clairvaux wrote:

In fine autem versus, Et nomen, inquit, Virginis Maria. Loquamur pauca et super hoc nomine, quod interpretatum maris stella dicitur, et matri Virgini valde convenienter aptatur. Ipsa namque aptissime sideri comparatur; quia, sicut sine sui corruptione sidus suum emittit radium, sic absque sui laesione virgo parturit filium. Nec sideri radius suam minuit claritatem, nec Virgini Filius suam integritatem. Ipsa est igitur nobilis illa stella ex Jacob orta, cujus radius universum orbem illuminat, cujus splendor et praefulget in supernis, et inferos penetrat: terras etiam perlustrans, et calefaciens magis mentes quam corpora, fovet virtutes, excoquit vitia. Ipsa, inquam, est praeclara et eximia stella, super hoc mare magnum et spatiosum necessario sublevata, micans meritis, illustrans exemplis. O quisquis te intelligis in hujus saeculi profluvio magis inter procellas et tempestates fluctuare, quam per terram ambulare; ne avertas oculos a fulgore hujus sideris, si non vis obrui procellis. Si insurgant venti tentationum, si incurras scopulos tribulationum, respice stellam, voca Mariam.

At the end of the verse [Luke 1:27], [Luke] says: "The name of the virgin was Mary". Let us also say something about this name, which translates as "Star of the Sea" and is very suitable for the virgin mother. ⁵¹⁴ She can be compared to a star because just as a star can send out its rays without [suffering] loss, she gave birth to a son as a virgin, without injury (the loss of her hymen). Neither does the ray diminish the star's brightness, nor does the Son [diminish] the Virgin's integrity. Hence, this is the noble "star arisen out of Jacob", whose ray illumines the entire world, whose brightness shines in the heights and penetrates the depths. Wandering throughout the earth, warming spirits (*mentes*) even more than bodies, she promotes virtues and burns up vices. She is,

⁵¹³ According to: Bezold, *Die Schatzhöhle*, p. 56, Syriac p. 232, Arabic p. 233.

⁵¹⁴ The name Mary is derived from the Hebrew *mir-yām*. Around 400 CE, Church father Jerome translated the name as *stilla maris*, "drop of the sea". Later this was misunderstood to be *stella maris*, thus "star of the sea". The first mention of the "star of the sea" is found in Paschasius Radbertus in the 9th century. Usually, the name *miryām* is translated as "their intractability" or "their bitterness".

⁽http://www.blueletterBible.org/tmp_dir/words/4/1160234686-6465.html)

I say, the very bright and special star, necessarily lifted above this great and wide sea, glowing with merit, shining with good example. When you notice that you reel between thunderstorms and storms during the flow of this life, instead of walking over the earth, then turn your eyes not away from the shine of this star unless you want to be overwhelmed by storms. When the winds of temptation arise, when you find yourself among the cliffs of distress, look at the star, call on Mary!⁵¹⁵

This understanding continues to live on in Catholicism today. This is surprising, because New Testament texts clearly identify Jesus, not Mary, as the morning star. How can one interpret this fact? Apparently, an early Christian tradition, represented by New Testament texts, attempted to "take away" the star of Venus from the goddess and identify it with the Messiah. However, the attempt failed. The power of the goddess was too great. She survives in the cult of Mary, and thus *Mary* became the morning star in Catholic tradition. It is, after all, remarkable how the reverence for Mary often overshadows that for Jesus. And does the expression "Mother of God" not almost suggest a higher rank for Mary than for her son?

Venus in Zoroastrianism

The magi came from the east and were possibly Zoroastrians. Therefore, the question arises whether Zoroastrian sources knew of a star of the *Saoshyant*, i.e. the redeemer of the world. Unfortunately, this question is hard to answer. In the turmoil of history, a substantial number of Zoroastrian sacred writings have been lost. However, early Christian sources assert that the Zoroastrians did know of such a star. Let these Christian sources be examined first.

The apocryphal Arabic Infancy Gospel asserts that the magi came to Jerusalem because of a "prophecy of Zoroaster".⁵¹⁶ The same statement is made by the Arabic historian Abu '1-Farağ (Bar Hebraeus, 13th century).⁵¹⁷ The *Opus imperfectum in Matthaeum*, an anonymous commentary on the Gospel of Matthew, tells of a writing that was known under the name of *Seth*. According to this text, every year after the hay harvest, twelve Persian magicians climbed a mountain named "Victory Mountain" (*mons victorialis*) where there was a cave. There, they waited for some "star of happiness" (*stella illa beatitudinis*) to appear and settle on the mountain. In the star, there was said to be the picture of a small boy and above him a cross. According to the Syriac *Chronicle of Zuqnin*, the twelve magicians saw a star rise up on a pillar of light and enter the cave. When the magi followed the

⁵¹⁵ Bernhard of Clairvaux, *De laudibus Virginis Matris*, Homilia 2,17, http://www.binetti.ru/bernardus/36.shtml ; translation D.K.

⁵¹⁶ Arabic Infancy Gospel 7, cited on p. 75.

⁵¹⁷ Cited below on pp. 337f.

star, it changed into the likeness of a small man who sent the magicians to Judea. $^{\rm 518}$

The Christian origin of these sources is obvious. Could their still be some truth in their reference to Zoroastrian doctrines? Their authors, at least, seem to have been of this opinion.

In the Zoroastrian text Zand-i Vohuman Yasht, which, however, was written in the epoch of Islam and therefore does not provide very reliable information about the magi of Matthew, another clue is given. There, Ahuramazdā prophecies to Zoroaster about the birth of a king who would vanquish an army of enemies of the Zoroastrian religion. A star would announce the birth of this child. The original text in the Middle Persian language (Pahlavi) reads as follows:

<pad dēn paydāg> kū ān šab ka ān kay zāyēd nišān ō gēhān rasēd, stārag az asmān wāred. ka ōy kay zāyēd stārag nišān nimāyēd {hād dādohrmazd guft kū ābān māh ud wād rōz}.

[In the religion, it is revealed] that in the night in which that prince will be born, a sign will come to the earth. A star will fall from the sky. When that prince will be born, the star will show a signal. This, says Dādohrmazd, will be in the month $\bar{A}b\bar{a}n$ and the day Wād, the 22nd.⁵¹⁹

The text apparently quotes an older Zoroastrian source. A bit later, it states that this prince would begin his reign at the age of 30, under the following astrological configuration:

ka stārag ī ohrmazd ul
ō bālist rasēd ud anāhīd rāy frōd abganēd xwadāyīh
ō kay rasēd.

When the star Jupiter (literally "star of Ahuramazdā") rises to its culmination point⁵²⁰ and throws down Venus (Anāhitā), then rulership comes to this prince.⁵²¹

⁵¹⁸ Opus imperfectum in Matthaeum, Hom. II 2; according to Widengren, Die Religionen Irans, p. 207f.; Duchesne-Guillemin, Jacques, "Die Magier in Bethlehem und Mithras als Erlöser?", p. 471f

⁵¹⁹ Middle Persian original text according to Cereti, *The Zand ī Wahman Yasn*, S. 142. West translates: "That a sign may come to the earth, the night when that prince is born, a star falls from the sky; when that prince is born the star shows a signal." (3,15; http://www.avesta.org/pahlavi/vohuman3.html) Cereti renders it as follows: "[In the religion it is revealed] that the night when that *kay* will be born a sign will reach the world, a star will fall from the sky. When that *kay* will be born a star will reveal the sign... {that is *Dādohrmazd* said, ,Month of *Ābān* and day *Wād*⁴}." (7,6; Cereti, p. 162).

⁵²⁰ *bālist*; translation of this term according to West. However, Cereti translates it as "exaltation". Thus, it may also refer to the astrological dignity of Jupiter, who is "exalted" in the sign of Cancer.

⁵²¹ West translates: "When the star Jupiter comes up to its culminating point (balist) and casts Venus down, the sovereignty comes to the prince." (op. cit. 3,18) Cereti:

Both passages speak about a star falling on the earth. The second one asserts that it is Venus. The configuration of Jupiter and Venus could be interpreted in two ways:

1. Jupiter culminates *just before sunrise*, while simultaneously Venus falls to the earth. Therefore, Venus makes her last morning appearance, that is, she can be seen as the morning star for the last time. Here, Venus sinking down to the earth apparently symbolises the appearance of the king on earth.

2. Jupiter culminates *just after sunset*, while simultaneously Venus falls to the earth. Therefore, Venus makes her last evening appearance, that is, she can be seen as the evening star for the last time. Only a few days later she will rise heliacally and become the morning star.

It is hard to decide which solution should be preferred. It is interesting, however, that here also the birth and the fate of a king seem to be determined by Venus. However, there seems to be a difference with ancient Jewish beliefs. While the Israelites connected the births of great kings with the first morning *rising* of Venus, in the texts quoted above the *last* appearance of Venus, either as morning or evening star, was the omen for the royal child. In any case, the ancient kingmaker Venus-Ishtar is the royal star here, again.⁵²²

The Persian goddess *Anāhitā*, whom the Greeks equated with Aphrodite (Venus)⁵²³, played an important role in Zoroastrianism. The planet Venus also carried her name in Sassanian astrology, as has been seen in the abovecited text. King *Artaxerxes* had statues erected for her, and in the Persian Empire she was venerated together with Ahura Mazda and Mithra, the god of the sky and the sun god. Ahura Mazda had created Mithra to be as great and mighty as he himself was, comparable to the Son of God in Christianity. It was Mithra's task to fight demons and to protect good men. The triad of Ahura Mazda, Mithra, and Anāhitā reminds one of the triad of God the Father, Jesus and Mary. As noted above, Mary is also identified with the morning star in Orthodox and Roman Catholic tradition.

As has been stated, it is *Anāhitā* who keeps the seed of Zoroaster in Lake Harun, from which the *Saoshyant* is supposed to be begotten one day.

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[&]quot;When the star Jupiter will reach its exaltation and it will throw Venus down, the lordship will reach the *kay*..." (op. cit. 7,8, p. 162).

⁵²² Whether this passage from the Zand ī Wahman Yasn has anything to do with the Star of Bethlehem is debated among experts. Carlo Cereti (op. cit. p. 204) and Roy Kotansky ("The Star of the Magi", p. 398ff.) do see a possible link here. M. Boyce and F. Grenet also consider it possible that the passage could go back to the Hellenistic period. (*A History of Zoroastrianism*, vol. III, p. 453, footnote 448) However, the Italian Iranologist Antonio Panaino does not believe it (private communication during the colloquium of 23/24 October 2014 on "The Star of Bethlehem" at the University of Groningen).

⁵²³ Cumont, *Textes et monuments*, vol 1, pp. 130f. Notes. 2.

Here, there is a very clear connection between the redeemer of the world and the goddess identified with Venus!

Thus, the assumption that Venus was considered as the birth star of the Saoshyant by Zoroastrians is in no way improbable.

Venus in Mithraism

It is possible that the above-mentioned Christian sources, according to which 12 magi were waiting for a "star of happiness" on a mountain, do not refer to Zoroastrian, but to Mithraic doctrine. Ancient authors apparently did not differentiate between them. Unfortunately, practically no original documents of the Mithraic religion are extant. Only the iconography of the *mithraea* (temples of Mithras), a few short inscriptions, and a mystery text written on papyrus can give some original clues about the doctrines of this religion.

Mithras was believed to have been born from a rock. This is reminiscent of the alleged birth of Jesus in a cave, which is testified to by apocryphal gospels. In fact, it is quite likely that there was a legend about a birth star of Mithras and that this related to Venus as well. The iconography of Mithras temples is rich in astrological symbolism, and *Venus* plays an important part in it. The greatest deed accomplished by Mithras was the sacrifice of a bull, where the bull obviously represents the zodiac sign of Taurus. Mithraic tauroctonies abound with depictions of constellations. Scorpio, being the opposition sign of Taurus, attacks the testicles of the bull. Also depicted are Hydra, Crater (a cup), Corvus (a raven), Canis major (a dog), and in a number of cases even the whole zodiac. However, the central figure in the scene is Taurus, the bull, whose astrological ruler is *Venus*, together with Mithras himself, who kills the bull and could represent either the Sun or perhaps the constellation of Perseus.

A mandatory part of tauroctonies were the two torch bearers *Cautes* and *Cautopates*, who most probably represent Venus as the morning and the evening star. *Cautes* holds his torch pointing up, perhaps as it is rising, and as against that, *Cautopates* holds it down, perhaps because it is setting.⁵²⁴ A torch also appears in depictions of the birth of Mithras. As the sun god,

⁵²⁴ The torch bearers are often interpreted as sunrise and sunset, or the equinoxes. H. Wagenvoort writes on this: "It is usual to see in these the rising and setting sun. But Cumont thinks it possible that they originally personified the morning star (Phosphorus, Lucifer) and the evening star (Hesperus, Vesper). The origins of this iconographic invention, so Dr. Vermaseren informs me, date from the 4th century B.C. Even Greek art is acquainted with almost the same idea, only then the morning and evening stars are usually winged. Thus Rehm (*R.E.* 8, 1254) writes: 'In the type just described we have an especially frequent case, the morning and evening stars confronted as winged torch-bearers, the one usually with raised, the other with lowered torch." (Wagenvoort, *Pietas*, p. 89).

Mithras, is shown being born from a rock holding a dagger in his right hand, which probably serves to open the earth at the place of rising, and a torch in his left had. Possibly the torch represented the morning star.⁵²⁵ The torch is seen on the right side of Mithras, similar to the morning star that is seen on the right side above the rising sun.

Furthermore, tauroctonies depict the following scene: At the top left, the sun god gets on his chariot, and above him, on the right, there is a depiction of *lucifer*, the morning star. By contrast, on the right side, the moon goddess moves towards her setting, accompanied by *vesper*, the evening star.⁵²⁶ The present investigation has shown that early Christians believed Jesus to have been born during a heliacal rising of Venus, immediately before sunrise. Later, it will be shown that if this is correct, then *it follows for astronomical reasons* that Jesus must have been conceived when Venus made her first evening appearance. In addition, it will be shown that she appeared together with the new moon above the western horizon. Could there be a connection?

Whether there was a legend according to which Mithras' birth coincided with either the first or last morning appearance of Venus cannot be stated for certain. However, when the many parallels between Christianity and Mithraism —which so shocked the Church Fathers—are considered, such a connection could well have existed. Under these circumstances, Matthew's account would have been seen in a different light: It would seem to indicate that not Mithras, but Jesus is the true redeemer.

Venus in Pre-Islamic Arabia

(This chapter is readable only in the printed edition.)

⁵²⁵ The Mesopotamian sun god rises in the morning with a knife in his hand. It serves to open the earth, or rather the mountain range from which he steps forth.

⁵²⁶ For instance, on the Mithras Stone of Osterburken in the *Badisches Landesmuseum* in Karlsruhe, Germany.

⁵²⁷ Noiville, "Le culte de l'étoile du matin chez les arabes préislamiques et la fête de l'épiphanie", pp. 368ff.

⁵²⁸ Joannes Damascenus, *De haeresibus liber*, Migne PG 94. Vide also Montet, "Un rituel d'abjuration des musulmans dans l'église grecque", p. 154 (Z. 19-23) and p. 153 (Z. 20-27); Cumont, "L'origine de la formule grecque d'abjuration", pp. 146ff.

Venus and Adonis

⁵²⁹ Noiville, op. cit., p. 376.

⁵³⁰ Noiville, op. cit., p. 374.

⁵³¹ Ihm, "Dusares", in: *Paulys Real-Enzyklopädie der Classischen Altertumswissenschaft*, V, col. 1865-1867.

⁵³² ğāriyatun ka 'ābun "virgin" (جارية كعاب, Lane, An Arabic-English Lexicon, part 7, p. 2616).

became public and the princess had to flee, she prayed to the gods and asked them to make her invisible. The gods fulfilled her wish and transformed her into a tree. After nine months, the tree gave birth to Adonis, and it was Venus-Aphrodite herself who took him up, cared for him, and even fell in love with him. She concealed him in a box (a coffin) and entrusted it to Persephone. However, the latter also fell in love with the handsome Adonis, and the two goddesses quarrelled about which one of them would be his companion. Zeus decided that every year, Adonis would live for some time with Persephone and for some time with Aphrodite. For this reason, Adonis alternately commutes between the underworld and the world of the living and, consequently, is a dying and resurrecting god.⁵³³

Also interesting in this context is the Mesopotamian myth that describes the death and resurrection of the goddess Ishtar-Inanna, who, again, can be identified with the planet Venus. She descends into the netherworld to visit her sister Ereshkigal, the queen of the netherworld. Ereshkigal kills Inanna with her "eye of death". However, the god Ea-Enki revives Inanna and brings her back to the world of the living. When she arrives on the surface of the earth and sees that all living beings have been wailing for her, with the only exception being her lover Dumuzi-Tammuz, she kills him with her "eye of death". The myth can be interpreted as referring to the heliacal setting of Venus as evening star and her heliacal rising as morning star. Dumuzi dies at the moment of her heliacal rising.⁵³⁴

The analogy with the story of Jesus is obvious: He is also a dying and resurrecting god and, as has been shown, was born shortly after a heliacal rising of Venus. Later, it shall be found that even the crucifixion date in the year 33 CE fell near a heliacal rising of Venus.

Tammuz also appears in the Old Testament. Ezekiel 8:14 mentions that women wailed for Tammuz in the temple of Yahweh.

Interestingly, Jerome, around 400 CE, relates that there was a sanctuary of Adonis in the birth cave of Jesus:

Ab Hadriani temporibus usque ad imperium Constantini, per annos circiter centum octoginta, in loco Resurrectionis simulacrum Jovis; in Crucis rupe, statua ex marmore Veneris a gentibus posita colebatur: existimantibus persecutionis auctoribus, quod tollerent nobis fidem resurrectionis et crucis, si loca sancta per idola polluissent. Bethleem nunc nostram, et augustissimum orbis locum de quo Psalmista canit: Veritas de terra orta est (Ps. 84. 12), lucus inumbrabat Thamuz, id est, Adonidis: et in specu, ubi quondam Christus parvulus vagiit, Veneris amasius plangebatur.

⁵³³ Apollodorus, *The Library* (Βιβλιοθήκη) 3.14.3-4.

⁵³⁴ Foster, *From Distant Days*, pp. 78-84 (English translation of the Akkadian version); Wolkstein/Kramer, *Inanna*, pp. 51-89 (English translation of the Sumerian version).

Since the times of Hadrian (117 - 138 CE, after the Bar Kokhbar revolt) [and] until the rule of Constantin (306-337 CE), [thus] for about 180 years, an idol of Jupiter was venerated at the place of the resurrection and a marble statue of Venus that was erected by the heathens at the rock of the crucifixion. For, the initiators of the prosecution believed that they could deprive us of our belief in the resurrection and the cross if they defiled the holy places by means of idols. Our Bethlehem and the most holy place of the world, about which the psalmist sings: *"The truth has risen from the earth"* (Ps. 84.12), is shadowed by a grove of Tammuz, i.e. of Adonis. And in the cave where formerly little Christ cried, the lover of Venus is wailed.⁵³⁵

Is it a mere coincidence that the dying and resurrecting lover of *Venus* was venerated at the birthplace of Jesus? Or should it be interpreted as another hint that the cult of Jesus was somehow linked with the morning star? Did the Romans try to make the early Christian sacred place a sanctuary of Adonis because the morning star played a part in both cults? Did they create a Venus sanctuary also at the place of crucifixion for similar reasons?

It is also interesting that Jerome cites a verse from a psalm which also refers to the rising (*orta est*) of some star. Does he oppose this rising star of Ezekiel to the rising Venus goddess of the followers of Adonis? Is Jerome perhaps even aware that the Star of Bethlehem could have been Venus? Or do we have to interpret this text in the context of the tradition that identifies Mary with the morning star? In a great number of eastern and western representations of the Madonna with child, Mary has a star in her left shoulder. Did Mary replace the mother of Adonis, i.e. Venus-Astarte-Ishtar?

The Roman Historian Ammianus Marcellinus relates details of a festival of Adonis that was celebrated in Antioch in the 4th century, just on the day Emperor Julian visited the city:

14. at hinc videre properans Antiochiam, orientis apicem pulcrum, usus itineribus solitis venit, urbique propinquans in speciem alicuius numinis votis excipitur publicis, miratus voces multitudinis magnae, salutare sidus inluxisse eois partibus adclamantis.

15. evenerat autem isdem diebus annuo cursu conpleto Adonea ritu veteri celebrari, amato Veneris, ut fabulae fingunt, apri dente ferali deleto, quod in adulto flore sectarum est indicium frugum et visum est triste quod amplam urbem principumque domicilium introeunte imperatore nunc primum, ululabiles undique planctus et lugubres sonus audiebantur.

14. And from there (from Tarsus; D. K.) he came to see Antioch, the beautiful crown of the Orient, using the usual ways. And when he approached the city, he was welcomed like some deity with public prayers, astonished about the calls of the great multitude who shouted that the salvific star had appeared in the eastern direction (lit.: in the parts of the dawn).

⁵³⁵ Hieronymus, *Epistula LVIII*,3, in: Migne, *Patrologia Latina*, XXII, 581. According to Eusebius of Caesarea (4th cent.), Hadrian erected a temple of Venus above the grave of Jesus. A sanctuary of Jupiter is not mentioned. In the year 326, Constantine removed the temple and built a church in its place.

15. It just happened in these days, after the completion of the course of a year, that the festival of Adonis was celebrated according to ancient custom, the festival of the lover of Venus, who, as legends assert, was carried off by the lethal tooth of a boar. This is an allusion to the crops that are cut off in their youthful heyday. And it seemed sad that just in the moment the emperor entered the glorious city for the first time, which was also the residence of princes, ululant lamentations were heard everywhere and sounds of mourning.⁵³⁶

People are said to jubilate about the appearance of the "salvific star" (*salutare sidus*) and then wail the death of Adonis. It is obvious that this star must have been Venus, who had just made her heliacal rising, her first appearance as the morning star. Incidentally, as has been stated already, the name of the star is not expressly mentioned, just as in Matthew 2. Everybody was just referring to "the star".

Summary

David Hughes asserted that Venus "has no astrological message". However, he could not be more wrong. In reality, Venus represented the goddess Ishtar-Astarte and therefore was the most important "star" in the religions and astrological traditions of the ancient Near East. As the morning star, she was the announcer of the new day. In Mesopotamian mythology, she suffers death and resurrection, a central theme of Christianity. In addition, she was considered – depending on tradition – as the mother, lover, or protective deity of Mesopotamian kings. Each one of these roles makes her a promising candidate for the Star of the Messiah. Although in *Graeco-Roman* astrology, Venus does not have an obvious connection with the idea of a god-chosen king of the Jews or Messiah, it must be kept in mind that the Near Eastern goddess Ishtar-Astarte is not necessarily identical to the goddess Aphrodite-Venus of the Greeks and Romans. The omens of Ishtar-Venus were important for the king went to war, then Ishtar went before him and fought for him.

Furthermore, it has been shown that in Zoroastrianism the Saoshyant was also associated with Venus, and that in Mithraism the morning star and the evening star must have played an important role, as well. Moreover, it has been shown that Venus played a central role in the ancient Arabian cult of Dusares, who, like Jesus, was believed to have been born from a virgin. The cult of Dusares, in which a black stone was venerated, was possibly also practiced in pre-Islamic Mecca in the Kaaba. Finally yet importantly, Jerome stated in 400 CE that there was a sanctuary of Adonis-Tammuz, a dying and resurrecting god and lover of Venus-Astarte-Ishtar, in Bethlehem. This cult could have directly influenced the Christian legend of the Star of Bethlehem, or perhaps also the other way round.

⁵³⁶ Ammianus Marcellinus, Res gestae 22.9.14-15.

Venus as the Star of the Messiah in Ancient Israel

Herald of Dawn

Venus also appears in the Bible in several places. It is even explicitly stated that Venus is the star of the Messiah. However, most authors writing about the star of the Messiah ignore these references completely.

At the end of the Revelation of John, Jesus says:

Έγὼ Ἰησοῦς ... εἰμι ἡ ῥίζα καὶ τὸ γένος Δαυίδ, ὁ ἀστὴρ ὁ λαμπρὸς ὁ πρωϊνός. I, Jesus, ... am the root and the offspring of David, the *bright morning star*. (Rev. 22:16)

As has been stated, one cannot expect the Bible to name the Greek and Roman goddesses Aphrodite or Venus. However, neither is this necessary. The expression "the bright morning star" is explicit enough. In the verse from Revelation just quoted, Jesus is called *prôinos*, "matutinal, of the morning". Some have tried to identify this "morning star" with Jupiter. However, in the Greek usage of the term, this is as nonsensical in Greek as it is in English.⁵³⁷ When Jupiter is seen in the east in the morning, he is not particularly bright. To the contrary, he appears rather faint in the brightening morning sky. He reaches his greatest brightness near the opposition to the Sun, in the days of his evening rising when he is visible all night long. Only Venus becomes extremely bright shortly after her heliacal rising.

A further verse connecting Jesus with the morning star is found in 2^{nd} Peter. Here the Greek expression for "morning star" is *phôsphoros*, and this word, too, can only mean Venus, not Jupiter.

Καὶ ἔχομεν βεβαιότερον τὸν προφητικὸν λόγον, ῷ̃ καλῶς ποιεῖτε προσέχοντες ὡς λύχνῷ φαίνοντι ἐν αὐχμηρῷ τοπῷ, ἕως οὖ ἡμέρα διαυγάσῃ καὶ φωσφόρος ἀνατείλῃ ἐν ταῖς καρδίαις ὑμῶν.

And so we possess the prophetic word more firmly, to which you will do well to attend, as to a lamp shining in a dark place, until day breaks and the morning star (*phôsphoros, lucifer* in the Latin Bible!) rises in your hearts. (2 Peter 1:19)

Notably, the morning star does not appear in complete darkness but at a time when the new day "shines forth" ($\delta i \alpha \nu \gamma \dot{\alpha} \sigma \eta$). This sounds like a heliacal rising of Venus. However, it takes place in the heart of believers. Apparently, Peter wants to say that Jesus is "born" in the hearts of believers. He also obviously alludes to the Star of Bethlehem. In particular, it should

⁵³⁷ Cf. Bruce Killian, "Venus, the Star of Bethlehem",

www.scripturescholar.com/VenusStarofBethlehem.htm (3rd September 2013)

be noted that the "rising" (*anatellein*) of the morning star obviously makes reference to the "rising" (*anatole*) of the Star of Bethlehem.

The Greek term used is *phôsphoros*. The Vulgate (the Latin Bible) uses the word *lucifer*. Both translate to "bringer of light" in English. The morning star indicates the break of "day", the light, the Kingdom of God. This becomes even clearer in another name for Venus: She is also called *heôsphoros*, "the bringer of dawn", which is used several times in the Septuagint, the Greek version of the Old Testament.

Nowadays, the name *Lucifer* is virtually only known as a name of the Devil. This tradition goes back to an interpretation of Isaiah 14:12-15 by the early church, where the fall of the king of Babylon is compared to the morning star's "fall" to the horizon and disappearance. As against that, in the Epistle of Peter, the word *lucifer* is still used for Jesus Christ as the spiritual light. This will be discussed later.

The Peshitta, the Aramaic Bible, translates:

< השלו השלי נותו השמשא נוגעי בלבה אבה ל

until the day becomes bright and the $Sun (šem \tilde{so})$ rises in your hearts (2. Peter 1:19)

Some English Bibles translate *phôsphoros* as "day star", which is ambiguous in meaning. It could refer to the morning star, which can be seen during the day if the separation from the Sun is great enough, or otherwise it could refer to the Sun himself. Such translations might be inspired by the "Sun of Righteousness" (Malachi 3:20 (= 4:2)). However, the words $\varphi\omega\sigma\varphi\phi\rho\sigma\zeta$ and *lucifer* never refer to the Sun, but only to the morning star.

The "lamp in a dark place" and the morning star rising in the heart in the Epistle of Peter is strongly reminiscent of the verse at the beginning of the Gospel of John, which describes the Messiah as follows:

Καὶ τὸ φῶς ἐν τῆ σκοτί
α φαίνει... ^{*}Ην τὸ φῶς τὸ ἀληθινόν, ὃ φωτίζει πάντα ἄνθρωπον, ἐρχόμενον εἰς τὸν κόσμον.

The light shines in the darkness \dots He was the true light, coming into the world, that enlightened every human being. (John 1:9)

Later in chapter 8, Jesus says:

ἐγώ εἰμι τὸ φῶς τοῦ κόσμου.
I am the light of the world. (John 8:12)

Thus, is the "light of the world" the morning star? Usually, it is rather associated with the "Sun of Righteousness" in Malachi 3:20 (= 4:2). However, it seems more plausible to interpret it as the morning star. In the Bible, Jesus is never expressly identified with the Sun, but only with the morning star.

The "light of the world" that "shines in the darkness" is also reminiscent of Matthew's quote from Isaiah 9:2, where a "rising light" ($\phi \tilde{\omega} \varsigma \dot{\alpha} v \acute{\epsilon} \tau \epsilon \iota \lambda \epsilon v$) is referred to.

ό λαὸς ὁ καθήμενος ἐν σκοτία φῶς εἶδεν μέγα, καὶ τοῖς καθημένοις ἐν χώρα καὶ σκιῷ θανάτου **φῶς ἀνέτειλεν** αὐτοῖς.

The people sitting in darkness saw a great light, and those sitting in the land and shadow of death, *a light arose* for them. (Matt 4:16)

Luke refers to the same passage in Isaiah in the following verses:

(1,76) καὶ σὺ δέ, παιδίον, προφήτης Ύψίστου κληθήση, προπορεύση γὰρ ἐνώπιον κυρίου ἑτοιμάσαι όδοὺς αὐτοῦ, (77) τοῦ δοῦναι γνῶσιν σωτηρίας τῷ λαῷ αὐτοῦ ἐν ἀφέσει ἀμαρτιῶν αὐτῶν, (78) διὰ σπλάγχνα ἐλέους θεοῦ ἡμῶν, ἐν οἶς ἐπισκέψεται ἡμᾶς ἀνατολὴ ἐξ ὕψους, (79) ἐπιφᾶναι τοῖς ἐν σκότει καὶ σκιῷ θανάτου καθημένοις, τοῦ κατευθῦναι τοὺς πόδας ἡμῶν εἰς όδὸν εἰρήνης.

(76) And you, little child, (i.e. John the Baptist; D.K.) shall be called a prophet of the Most High, for you will go before the Lord to prepare his ways (77) to give his people knowledge of salvation through the forgiveness of their sins (78) because of the tender mercy of our God by which *the* **rising**⁵³⁸ from on high shall visit us (79) to shine for those sitting in darkness and the shadow of death, to direct our feet into the path of peace. (Luke 1:76-79)

The light shining in the darkness establishes a clear reference to John 1:9. The "rising from on high", on the other hand, is just as clear a reference to the story of the Star of the Messiah. The word here translated as "rising", i.e. *anatolê*, is the same as the one used by Matthew, which has been found to signify a heliacal rising.

George Mackinlay, who also believes that the Star of Bethlehem is Venus as the morning star, gives a different interpretation for the passages quoted above. In his view, the "light in the darkness" in the Gospel of John and the "rising from on high" in Luke does not refer to the morning star but to the "Sun of Righteousness" (Mal 3:20 (4:2); Matt 17:2; Rev. 1:16). Thus, he believes that Jesus is not represented by the morning star, but by the Sun, whereas the morning star represents John the Baptist, because he "goes before" the rising of the "Christ Sun" and announces it.⁵³⁹

However, when "the light shines *in the darkness*", or "when it shines upon those who sit in the darkness", then it could not be the Sun because the Sun does not shine in the darkness but when the darkness has disappeared. The connection between John's "light of the world" and the morning star in Rev. 22:16 and 2 Peter 1:19 seems more appropriate. The intended meaning is not that John as the "morning star" announces the "Messiah Sun", but that Jesus Christ as the "morning star" announces the "Day of the Lord", the rising "Sun of Righteousness", the "Day of Judgment", the "Kingdom of God".

Interesting in this context is also the following passage in the Gospel of John:

⁵³⁸ NASB translates *anatole* as "sunrise", which, of course is not correct, but obviously is inspired by the "Sun of Righteousness".

⁵³⁹ Mackinlay, The Magi: How they Recognised Christ's Star, p. 39ff.

(33) ὑμεῖς ἀπεστάλκατε πρὸς Ἰωάννην, καὶ μεμαρτύρηκεν τῇ ἀληθεία ... (35) ἐκεῖνος ἦν ὁ λύχνος ὁ καιόμενος καὶ φαίνων, ὑμεῖς δὲ ἠθελήσατε ἀγαλλιαθῆναι πρὸς ὥραν ἐν τῷ φωτὶ αὐτοῦ. (36) Ἐγὼ δὲ ἔχω τὴν μαρτυρίαν μείζω τοῦ Ἰωάννου...

(33) You have sent to John, and he has testified to the truth. ... (35) He was *the lamp* that was burning and was *shining* and you were willing to rejoice for a while in his light. (36) But the testimony which I have is greater than the testimony of John;... (John 5:33-36)

Mackinlay believes that John as the "shining lamp" here stands for the morning star and Jesus the Sun⁵⁴⁰. However, these verses are *exactly parallel* to 2 Peter 1:19. Let this verse again be examined again:

Καὶ ἔχομεν βεβαιότερον τὸν προφητικὸν λόγον, ῷ καλῶς ποιεῖτε προσέχοντες ὡς λύχνῷ φαίνοντι ἐν αὐχμηρῷ τοπῷ, ἔως οὖ ἡμέρα διαυγάσῃ καὶ φωσφόρος ἀνατείλῃ ἐν ταῖς καρδίαις ὑμῶν.

And so we possess the prophetic word more firmly, to which you will do well to attend, as to a *lamp shining* in a dark place, until day breaks and *the morning star* (*phôsphoros, lucifer* in the Latin Bible!) rises in your hearts. (2 Peter 1:19)

Here, the morning star is opposed to a lamp. If this dichotomy is transferred to John 5:33ff., then it becomes obvious that not John, but *Jesus* is the morning star. John is only the "shining lamp" used until the appearance of the morning star.

In this context, the following passage at the beginning of the Gospel of Mark is also to be discussed:

(2) Καθώς γέγραπται ἐν τῷ Ἡσαΐα τῷ προφήτῃ (var. ἐν τοῖς προφήταις). Ἱδοὺ ἀποστέλλω τὸν ἄγγελόν μου πρὸ προσώπου σου, ὃς κατασκευάσει τὴν ὁδόν σου· (3) φωνὴ βοῶντος ἐν τῇ ἐρήμῷ· Ἐτοιμάσατε τὴν ὁδὸν κυρίου, εὐθείας ποιεῖτε τὰς τρίβους αὐτοῦ, (4) ἐγένετο Ἰωάννης ὁ βαπτίζων ἐν τῇ ἐρήμῷ κῃρύσσων βάπτισμα μετανοίας εἰς ἄφεσιν ἁμαρτιῶν.

(2) As it is written in the prophet Isaiah (var. in the prophets): "Behold, I send my messenger before your face, who will prepare your way before you"; (3) [and:] "The voice of one crying in the wilderness: 'Make ready the way of the Lord! Make his paths straight!" (4) John the Baptist appeared in the wilderness and preached the baptism of repentance for forgiveness of sins. (Mk 1:2-4)

This can be interpreted to mean that John the Baptist was the "messenger" who appeared before Jesus and prepared his way. Since the Greek word *angelos* means "messenger" as well as "angel", and since angels often stand for stars in the Bible and apocrypha, this angel could also represent the morning star. Thus, John could be compared to the morning star and Jesus to the Sun. The statement is quoted from the prophet Malachi (Mal. 3:1). There, the same ambiguity is given. The Hebrew word *mal'āk*, which the Septuagint renders as *angelos*, can refer to a "messenger" as well as an "angel".

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⁵⁴⁰ Mackinlay, op. cit., pp. 67ff.

This "messenger" or "angel" prepares the way of the "Lord" ($\bar{a}d\bar{o}n$), who is called the "Sun of Righteousness" ($\bar{\eta}\psi\psi$; ήλιος δικαιοσύνης) at the end of the same chapter (Mal. 3:20). Thus, the question arises whether there actually was an older tradition that identified John the Baptist with the morning star and Jesus with the Sun. At least, Matthew explicitly confirms that the "angel" or "messenger" is John:

οὗτός ἐστιν περὶ οὖ γέγραπται· Ἰδοὺ ἐγὼ ἀποστέλλω τὸν ἄγγελόν μου πρὸ προσώπου σου, ὃς κατασκευάσει τὴν ὀδόν σου ἔμπροσθέν σου

For this (John) is he, of whom it is written, "Behold, I send my messenger before your face, who will prepare your way before you." (Matthew 11:10)

However, the Gospel of John makes the following statement about John the Baptist:

(6) Ἐγένετο ἄνθρωπος ἀπεσταλμένος παρὰ θεοῦ, ὄνομα αὐτῷ Ἰωάννης· (7) οὖτος ἦλθεν εἰς μαρτυρίαν, ἵνα μαρτυρήσῃ περὶ τοῦ φωτός, ἕνα πάντες πιστεύσωσιν δι' αὐτοῦ. (8) οὐκ ἦν ἐκεῖνος τὸ φῶς, ἀλλ' ἕνα μαρτυρήσῃ περὶ τοῦ φωτός.

(6) A man appeared, sent from God, whose name was John. (7) The same came as a witness, that he might testify about the light, that all might believe through him. (8) He was not the light, but was sent that he might testify about the light. (John 1:6-8)

Some have suggested that John the Baptist was actually not a precursor of Jesus but his competitor. Perhaps he was also associated with the morning star, and the Evangelist wants to refute this view. As will be shown, the prophets of Israel were often connected with the morning star. However that may be, in the passages quoted above, the light that shines in the darkness is the morning star that announces the new day.

From the above considerations, it also follows that the traditional view that the Virgin Mary is "the morning star" that goes before the Christ Sun is not supported by biblical references. Therefore, the following prayer of Pope John XXIII in a pontifical speech on 7 December 1959, the day before the Conception of Mary, is not really in agreement with the Bible:

O Vergine Immacolata, radiosa immagine di candore e di grazia, che col tuo apparire diradi le tenebre della notte incombente, e ci innalzi ai fulgori del Cielo, guarda benigna ai tuoi figli e devoti, che si stringono a te. **Stella del mattino, prepara i nostri pensieri alla venuta del Sole di giustizia**, da te portato al mondo.

O immaculate Virgin, shining image of purity and grace, who illumines the darkness of the approaching night with your appearance and raises us to the splendour of the sky: Benevolently look upon your children and devotees, who crowd around you. *Morning star, prepare our thoughts for the arrival of the Sun of Righteousness*, which you have brought to the world.⁵⁴¹

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⁵⁴¹ "Discorso del santo padre Giovanni XXIII ai fedeli riuniti nella Basilica dei SS. XII Apostoli, in occasione della chiusura della «Novena dell'Immacolata»" (7 dic. 1959).
These beliefs of the church are obviously a "reframing" of certain New Testament ideas. In any case, the "light that shines in the darkness" mentioned at the beginning of the Gospel of John certainly does not stand for Mary, but for Jesus. Also, at the end of Revelation it is not Mary but Jesus who calls himself the "bright morning star".⁵⁴² The "reframing" is probably inspired by the cult of the old oriental Queen of Heaven Ishtar (Astarte, Ashteret, Athtart), who was associated with the planet Venus.

In addition to the references given above, the following verses could also refer to Jesus as the morning star:

"In fact, even though it is not possible to establish an exact chronological point for identifying the date of Mary's birth, the Church has constantly been aware that Mary appeared on the horizon of salvation history before Christ. It is a fact that when "the fullness of time" was definitively drawing near-the saving advent of Emmanuelshe who was from eternity destined to be his Mother already existed on earth. The fact that she "preceded" the coming of Christ is reflected every year in the liturgy of Advent. Therefore, if to that ancient historical expectation of the Savior we compare these years which are bringing us closer to the end of the second Millennium after Christ and to the beginning of the third, it becomes fully comprehensible that in this present period we wish to turn in a special way to her, the one who in the "night" of the Advent expectation began to shine like a true "Morning Star" (Stella Matutina). For just as this star, together with the "dawn," precedes the rising of the sun, so Mary from the time of her Immaculate Conception preceded the coming of the Savior, the rising of the "Sun of Justice" in the history of the human race.."

(Revera, si certum punctum temporis statui non potest, unde dies natalis Mariae definiatur, constanter Ecclesia sibi conscia est in historiae salutis prospectu prius Mariam apparuisse quam Christum. Reapse, appropinquante tandem «plenitudine temporis», seu adventu Salvatoris salvifico, iam ea quae ex aeternitate Mater eius destinata erat, exsistebat in terra. Haec Christi adventus praegressio eius quotannis in Adventus Liturgia relucet. Si ergo anni, quibus subsumus fini secondi Millennii post Christum natum et initio tertii, cum antiqua historica Salvatoris exspectatione comparantur, piene comprehenditur nunc peculiari modo nos ardenter intendere in eam quae, media exspectationis Adventus «nocte», resplendere coepit ut vera «Stella matutina». Nam, sicut haec stella una cum aurora ortui solis antevenit, ita Maria inde a sua conceptione immaculata adventui Salvatoris antevenit, ortui «solis iustitiae» in humani generis historia.)

http://www.vatican.va/holy_father/john_paul_ii/encyclicals/documents/hf_jpii_enc_25031987_redemptoris-mater_en.html

http://www.vatican.va/holy_father/john_paul_ii/encyclicals/documents/hf_jpii_enc_25031987_redemptoris-mater_lt.html

Interestingly, this text seems to state that the morning star appears either on the date of the first sliver of the "virgin moon" or on the date of full moon.

⁵⁴² Cf. the *Encyclica Redemptoris Mater* by Pope John Paul II, 1986, paragraph 3 of the introduction:

ἔγειρε, ὁ καθεύδων, καὶ ἀνάστα ἐκ τῶν νεκρῶν, καὶ ἐπιφαύσει σοι ὁ Χριστός. Awake, you who are sleeping, and rise up from the dead, and the Christ will give you light! (Ephesians 5:14b)

ή νὺξ προέκοψεν, ή δὲ ἡμέρα ἤγγικεν.

The night is far advanced, and the day is at hand. (Romans 13:12a)

... and it is the morning star which makes one recognise that. The verse makes it clear that even years after the crucifixion, it is still "night", although sunrise is near. Jesus therefore cannot have been the Sun, but must have been the morning star. Just as the heliacal rising of the morning star precedes the imminent sunrise, Jesus announced the imminent arrival of the Kingdom of God.

In this, it has become clear that the Star of the Messiah is not just a peculiarity in the Gospel of Matthew. References to it can be found throughout the New Testament. Undoubtedly, it was part of the teachings of early Christianity, even though that is not clear at first sight.

The "light in the darkness" in John 1:9, Matthew 4:16 and Luke 1:78f. makes reference to the following passage in Isaiah (Is 9:1; 5):

ָהָעָם הַהֹּלְכִים בַּחֹשֶׁךּ רָאוּ אור גָּדול ישְׁבֵי בְּאָרֶץ צַלְמָוֶת אור נָגַה עֲלֵיהֶם: ... כִּי־יָלֶד יַלִּד-לְנוּ בֵּן נְתַּן-לְנוּ וַתְּהִי הַמִּשְׁרָה עַּל־שִׁכְמו ...

ό λαὸς ὁ πορευόμενος ἐν σκότει, ἴδετε φῶς μέγα· οἱ κατοικοῦντες ἐν χώρα καὶ σκιῷ θανάτου, φῶς λάμψει ἐφ' ὑμᾶς. ... ὅτι παιδίον ἐγεννήθη ἡμῖν, υἰὸς καὶ ἐδόθη ἡμῖν, οὖ ἡ ἀρχὴ ἐγενήθη ἐπὶ τοῦ ὥμου αὐτοῦ,

The people who walked in darkness have seen a great light; upon those who dwelt in the land of the shadow of death light has shone. ... For a child is born to us, a son is given to us and the reign rests on his shoulder...⁵⁴³

To Christians, this text is a prophecy about Jesus; by contrast, according to Jewish tradition the text foretells the birth of Hezekiah, the son of Ahas, king of Judah. As has been seen, Matthew reproduces this passage as follows:

ό λαὸς ὁ καθήμενος ἐν σκοτία φῶς εἶδεν μέγα, καὶ τοῖς καθημένοις ἐν χώρα καὶ σκιῷ θανάτου **φῶς ἀνέτειλεν** αὐτοῖς.

The people sitting in darkness saw a great light, and those sitting in the land and shadow of death, to them *a light arose*. (Matt 4:16)

The "rising of the light" ($\phi \tilde{\omega} \zeta \, \dot{\alpha} v \dot{\epsilon} \tau \epsilon \iota \lambda \epsilon v$) clearly associates the "rising" ($\dot{\alpha} v \alpha \tau o \lambda \dot{\eta}$) of the "star" in Matthew 2.

The morning star is also found in Job. Job curses the day of his birth and the stars that heralded this day with their rising.

⁵⁴³ The Masoretic standard text and an Isaiah scroll from Qumran continue as follows: "and his name is called: wonderful, counsellor, powerful god, father-forever, prince of peace" (וויקרא שָׁמו פָּלָא יועַץ אַל גָּבור אָבִיעַד שָׂר־שָׁלוֹם:). However, the Septuagint reads as follows: "and his name is called: Messenger (or angel) of the Great Wisdom" (καὶ καλεῖται τὸ ὄνομα αὐτοῦ μεγάλης βουλῆς ἄγγελος).

הּיום הַהוּא יְהִי חֹשֶׁךּ ... : הָנֵּה הַלַּיְלָה הַהוּא יְהִי גַּלְמוּד אַל־תָּבא רְנָנָה בֹו: ... יֶחְשְׁכוּ כוֹרְבֵי נִשְׁפֿו יְקו־לְאור וָאַין וְאַל־יִרְאֶה בְּעַפְעַפֵּי־שָׁחַר:

ή ήμέρα ἐκείνη εἴη σκότος ... ἀλλὰ ή νὺξ ἐκείνη εἴη ὀδύνη, καὶ μὴ ἔλθοι ἐπ' αὐτὴν εὐφροσύνη μηδὲ χαρμονή[.] ... σκοτωθείη τὰ ἄστρα τῆς νυκτὸς ἐκείνης, ὑπομείναι καὶ εἰς φωτισμὸν μὴ ἕλθοι καὶ μὴ ἴδοι **ἑωσφόρον ἀνατέλλοντα**

May that day be darkness! ... Behold, let that night be barren; Let no joyful shout enter it. ... May the stars of its twilight (of that night) be darkened; may it look for light and there is none; may it not see the eyelashes of the dawn! (Job 3:4; 7; 9)

(Septuagint:) ... may it not see the rising morning star.

The Septuagint thus renders "the eyelashes of the dawn" (עַפְעַפֵּי־שָׁחַר) as "the rising morning star" (ἐωσφόρον ἀνατέλλοντα). It has to be noted that the Greek word *heōsphoros* unequivocally refers to the planet Venus.

According to Job 38:7, the morning stars rejoiced at the dawn of creation. *Heralding the coming day* – undoubtedly that was the symbolism of Venus as the morning star in the Old Testament.

Particularly noteworthy in the context of Matthew 2 is Isaiah 60:1-6:

קוּמִי אָורִי כִּי בָ**א אוֹרֵדְ** וּכְבָׂוד יְהָוָה עָלַיִדְ **זְרָח**:

Φωτίζου φωτίζου, Ιερουσαλημ, ήκει γάρ σου **τὸ φῶς**, καὶ ἡ δόξα κυρίου ἐπὶ σὲ ἀνατέταλκεν.

(1) Arise, shine⁵⁴⁴; for your *light* has come, and the glory of Yahweh *has risen* upon you.

כִּי־הִגָּה הַחֹשֶׁדְ' יְכַסָּה־אֶֶׁרֶץ וַעֲרָפָל לְאֵמֶים

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וְעָלַיִהְ יִזְרַח יְהוָה וּכְבוֹדוֹ עָלַיִהְ יֵרָאֶה:
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ίδοὺ σκότος καὶ γνόφος καλύψει γῆν ἐπ' ἔθνη·

έπὶ δὲ σὲ φανήσεται κύριος, καὶ ἡ δόξα αὐτοῦ ἐπὶ σὲ ὀφθήσεται.

(2) For behold, darkness will cover the earth and darkness the peoples;

but Yahweh will rise upon you, and His glory will appear upon you.

וָהֶלְכוּ גוּיִם לְאוֹרֵהְ וּמְלָכִים **לְנֹגַה זַרְחֵ**דְ:

καὶ πορεύσονται βασιλεῖς τῷ φωτί σου καὶ ἔθνη τῇ λαμπρότητί [τῆς ἀνατολῆς (var.)] σου.

(3) And nations will come to your light, and kings to the brightness of your rising.

שְׂאִי־סָבִיב עֵינַיִה וּרְאִי כֵּלָם נְקְבְּצוּ בָאוּ־לָה בּניה מרחוק יבאוּ וּבנתיה על־צד תּאמנה:

ἆρον κύκλφ τοὺς ὀφθαλμούς σου καὶ ἰδὲ συνηγμένα τὰ τέκνα σου· ἰδοὺ ἥκασιν πάντες οἱ υἱοί σου μακρόθεν, καὶ αἱ θυγατέρες σου ἐπ' ὤμων ἀρθήσονται.

(4) Lift your eyes around and see: They all gather together and come to you. Your sons will come from afar and your daughters will be carried in the arms.

⁵⁴⁴ Imperative in feminine gender, thus addressed to the city of Jerusalem.

אָז הִרְאִי וְנָהַרְהְ וּפָחֵד וְרָחֵב לְבָבֵךְ כִּי־יֵהֶפֵּךְ עָלִיִךְ הֲמׂון יָם חֵיל גוּיִם יָבֹאוּ לָךְ:

τότε ὄψη καὶ φοβηθήση καὶ ἐκστήση τῆ καρδία,

ότι μεταβαλεῖ εἰς σὲ πλοῦτος θαλάσσης καὶ ἐθνῶν καὶ λαῶν. καὶ ἥξουσίν σοι.

(5) Then you will see and be radiant, and your heart will tremble and become wide,

because the rushing of the sea will turn towards you, the power of the nations will come to you.

שִׁפְעַת גְּמַלִים תְּכַסֵּך בָּכְרֵי מִדְיָן וְעֵיפָה כַּלָם מִשְׁבָא יָבֹאוּ **זָהָב וּלְבוּנָה יִשְׂאוּ** וּתְהַלֹת יְהוָה יְבַשֵּׂרוּ:

ἀγέλαι καμήλων, καὶ καλύψουσίν σε κάμηλοι Μαδιαμ καὶ Γαιφα[.] πάντες ἐκ Σαβα ἥξουσιν φέροντες χρυσίον καὶ λίβανον οἴσουσιν καὶ τὸ σωτήριον κυρίου εὐαγγελιοῦνται.

(6) A multitude of camels will cover you, the young camels of Midian and Ephah.

All those from Sheba will come; *they will bring gold and frankincense*, and will proclaim the praises of Yahweh.

Here, again, the light of Jahweh rises over the land that is in darkness. In addition, foreign people arrive and bring gifts such as gold and frankincense. Matthew must be alluding to this text when the *magi* arrive at the rising of the Star of Bethlehem and also bring gold and frankincense as gifts.

Planet of the Reign of a King

In the Revelation of John there is a further verse connecting Jesus specifically with the morning star.

Καὶ ὁ νικῶν καὶ ὁ τηρῶν ἄχρι τέλους τὰ ἔργα μου, δώσω αὐτῷ ἐξουσίαν ἐπὶ τῶν ἐθνῶν, καὶ ποιμανεῖ αὐτοὺς ἐν ῥάβδῷ σιδηρῷ ὡς τὰ σκεύη τὰ κεραμικὰ συντρίβεται, ὡς κἀγὼ εἴληφα παρὰ τοῦ πατρός μου, καὶ δώσω αὐτῷ τὸν ἀστέρα τὸν πρωϊνόν.

And to him who overcomes and keeps my ways until the end, to him will I give power over the nations; and he shall pasture them with an iron rod, as the potter's vessels are broken into pieces, just as I received from my Father; and *I shall give him the morning star*. (Revelation 2:26 ff.)

Here, the morning star seems to represent an authorisation for regency, a sceptre, and it is reminiscent of the Old Testament prophecy about the Messiah and the star:

אֶרְאָנוּ וְלֹא עַתָּה אֲשׁוּרָנוּ וְלֹא קָרוֹב דְּרַדְ כּוֹכָב מִיַּעֲקֹב וְקָם **שׁבָט** מִיּשְׁרָאֵל וּמָחַץ פַּאֲתֵי מוֹאָב וְקַרְקַר כָּל־בְּנֵי־שֵׁת

I see him, but not now, I behold him but not near:

A *star* shall come forth from Jacob and a *sceptre* shall rise out of Israel And shall smite through the corners of Moab and break down all children of Seth. (Numbers 24:17)

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The Septuagint renders the verse about the star as follows, where the Greek wording again shows an obvious connection with Matthew:

ἀνατελεῖ ἀστρον
ἐξ Ιακωβ, καὶ ἀναστήσεται ἄνθρωπος ἐξ Ισραηλ

A star will rise from Jacob and a man stand up out of Israel...

This theme, the morning star as a symbol of kingship, hails from Mesopotamia.

The same idea of the morning star as a symbol of royal rule also appears in Isaiah, where the king of Babylon is compared to the morning star, and his downfall is prophesied.

12 אֵיך נַפַלתַ מִשַׁמַיִם הֵילֵל בָּן־שַׁחַר נְגִדַעָתַ לַאָרֵץ חוֹלָשׁ עַל־גּויִם: 13 ואַתַּה אַמַרַתַּ בְּלְבַבָדָ הַשֵּׁמֵיִם אָעֵלֶה מִמַּעַל לְכוֹכְבֵי־אָל אָרִים כָּסָאִי וָאָשֵׁב בָּהַר־מועָד בְּיַרְכָּתֵי צפון: 14 אעלה על־בּמתי עב אדמה לעליון: 15 אד אל־שאול תּוּרד אל־ירכּתי־בור: (12) How you have fallen from heaven, O star of the morning, son of the dawn! You have been cut down to the earth, You who have weakened the nations! (13) But you said in your heart, "I will ascend to heaven; I will raise my throne above the stars of God, And I will sit on the mount of assembly In the recesses of the north. (14) I will ascend above the heights of the clouds; I will make myself like the Most High." (15) Nevertheless you will be thrust down to Sheol, To the recesses of the pit. (Isaiah 14:12-15, NASB; cf. Ezekiel 28:11-19) The Septuagint renders the first part of verse 12 as follows:

πῶς ἐξέπεσεν ἐκ τοῦ οὐρανοῦ ὁ ἑωσφόρος ὁ πρωὶ ἀνατέλλων;

How did he fall from the sky, the morning star that rises early?

Again, the Greek name of Venus as the morning star, heōsphoros, is used.

The rising of the morning star and its necessary setting at some time is apparently compared here to the rise to kingship and a fall from kingship. Venus and Mercury are the only celestial bodies that can "set" in the east, that is, when they disappear from the morning sky and become evening stars. This surprising fact is compared with the fall of a previously powerful king. The symbolic link of the morning star to kingship further confirms that in the Old Testament, Venus was seen as the star of the Messiah.

Comparable verses are found in Ezekiel 28:11-19, where it is stated that the king of Tyre had once been appointed by God to the position of a shining "cherub", but was brought to his downfall because he had abused his power.

New Testament concepts, according to which Satan appears as an "angel of light" and falls down from heaven belong in the same context:

αὐτὸς γὰρ ὁ Σατανᾶς μετασχηματίζεται εἰς ἄγγελον φωτός.Satan himself takes the form of an angel of light. (2 Cor. 11:14) Ἐθεώρουν τὸν Σατανᾶν ὡς ἀστραπὴν ἐκ τοῦ οὐρανοῦ πεσόντα. I saw Satan fall from heaven like lightning (ἀστραπή). (Luke 10:18)

It seems that the Devil is here seen as the declining morning star, and apparently also as a "king" who had once been chosen by God but who had abused his power and thus had to fall.

Further verses associating power and light read as follows:

8 אָז יִבָּקַע כַּשֵׁחַר אוֹרֶה וַאֲרֵכְתָּדְ מְהַרָה תִצְמָח וְהָלַדְ לְכָּנֶידְ צִדְקֵה כְּבוֹד יְהוָה יַצַּסְפֶּדְ: ... 10 ... וְזָרַח בַּאַשֶׁרָ אוֹרֶק וַצַּפַלְתָך כַּצָהָרַיִם:

(8) Then your light shall break forth like the dawn, and your wound shall quickly be healed; your vindication shall go before you, and the glory of the Lord shall be your rearguard....
(10) ... Then light shall rise for you in the darkness and the gloom shall become for you like midday. (Isaiah 58:8; 10b, NASB)

And in the Psalms, there is the following verse:

עַמְד נְדָבֹת בִּיום חֵילָד בְּהַדְרֵי־לְדֶשׁ מֵרֶחֶם מִשְׁחָר לְדָ טֵל יַלְדָתֶיוּ:

Your people will volunteer freely in the day of Your power; In holy array, *from the womb of dawn*, Your youth are to You as the dew. (Psalm 110:3; NASB)

In the Septuagint, the verse reads as follows:

ἐκ γαστρὸς πρὸ ἑωσφόρου ἐξεγέννησά σε. ex utero ante **luciferum** genui te (Vulgate) from the womb, from the morning star have I begotten you.⁵⁴⁵

Again, it can be stated that the Greek word *heōsphoros* (in the Vulgate *lucifer*) can only refer to Venus as the morning star.

In Hosea, there is the following passage:

לְכוּ וְנָשׁוּבָה אֶל־יְהוָה כִּי הוּא טָרָף וְיִרְפָּאֵנוּ יַהְ וְיַחְבָּשֵׁנוּ: יְחֵיֵנוּ מִיּמֶיִם בּּיּום הַשְׁלִישִׁי יְקְמֵנוּ וְנִחְיֶה לְפָנָיו: וְנֵדְעָה נְרְדְּפָה לָדַעַת אֶת־יְהוָה כְּשֵׁחַר נָכוון מוּצָאו

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⁵⁴⁵ Septuagint, Psalm 109:3, quoted like this by Justin Martyr, *Dialogue with Trypho* 32.

(1) Come, let us return to Yahweh;
 For he has torn us, but He will heal us;
 He has wounded us, but He will bandage us.
 (2) He will revive us after two days;
 He will raise us up on the third day,
 That we may live before Him.
 (3) So let us know, let us press on to know Yahweh.
 His going forth is as certain as the dawn... (Hosea 6:1-3)

The first half of this quote could be linked symbolically to the disappearance of Venus as the evening star and her reappearance as the morning star – similar to the death and resurrection of Jesus.

In Zechariah 3:6 and 6:12 in the version of the Septuagint, the expected Messiah is even given the name $Anatol\bar{e}$, which in common translations is rendered as "Sprout" or "Branch", but could also be translated as "Rising":

(12) כָּה אָמֵר יְהְוָה צְבָאָוֹת לֵאמֵר הְנֵה־אָּׁישׁ **אֱמַח** שְׁמוֹ וּמִתּחְתָּיו יִצְמָׁ**ח** וּבָנָה אֶת־הֵיכֵל יְהוֶה: (13) וְהוּא יִבְנֶּה אֶת־הֵיכֵל יְהוָה וְהוּא־יִשְׂא הוֹד וְיָשֵׁב וּמָשֵׁל עַל־כָּסְאֵו וְהָיָה כֹהֵן עַל־כִּסְאוֹ וַעֲצַת שָׁלוֹם תִּהְיָה בֵּין שְׁנֵיהֶם:

(12) λέγει κύριος παντοκράτωρ 'Ιδού ἀνήρ, '**Ανατολὴ** ὄνομα αὐτῷ, καὶ ὑποκάτωθεν αὐτοῦ ἀνατελεῖ, καὶ οἰκοδομήσει τὸν οἶκον κυρίου[.] (13) καὶ αὐτὸς λήμψεται ἀρετὴν καὶ καθίεται καὶ κατάρξει ἐπὶ τοῦ θρόνου αὐτοῦ, καὶ ἔσται ὁ ἱερεὺς ἐκ δεξιῶν αὐτοῦ, καὶ βουλὴ εἰρηνικὴ ἔσται ἀνὰ μέσον ἀμφοτέρων.

(12) Yahweh of the hosts speaks: Behold, a man whose name is *Sprout* (or: *Rising*), and he will *sprout* (or: *rise*) from his place and will build the temple of Yahweh. (13) And it is *he* that will build the temple of Yahweh, and it is *he* that will bear glory, and he will sit and rule on his throne. And he will be priest on his throne, and the counsel of peace will be between the two of them. (Zechariah 6:12f.)

Of course, early Christian authors already referred this passage to Christ, even directly to Matthew 2. Justin Martyr writes:

Καὶ ὅτι ὡς ἔμελλεν ἀνατέλλειν αὐτὸς διὰ τοῦ γένους τοὺ Ἀβραάμ, Μωυσῆς παρεδήλωσεν οὕτως εἰπών Ἀνατελεῖ ἄστρον ἐξ Ἰακώβ, καὶ ἡγούμενος ἐξ Ἱσραήλ. Καὶ ἄλλη δὲ γραφή φησιν Ιδοὺ ἀνήρ, ἀνατολὴ ὄνομα αὐτῷ. Ἀνατείλαντος οὖν καὶ ἐν οὐρανῷ ἅμα τῷ γεννηθῆναι αὐτὸν ἀστέρος, ὡς γέγραπται ἐν τοῖς ἀπομνημονεύμασι τῶν ἀποστόλων αὐτοῦ, οἱ ἀπὸ Ἀραβίας μάγοι ἐκ τούτου ἐπιγνόντες, παρεγένοντο, καὶ προσεκύνησαν αὐτῷ.

And that he should rise (or: sprout) like this, was intimated by Moses as follows: "A star will rise from Jacob and a leader from Israel." (Numbers 24:17) And another writing says: "Behold, a man, his name is 'Rising'" (Zech. 6:12). Now, when a star rose in the sky at the same time as his birth, as is written in the records of his disciples, magi from Arabia noticed it and came and prostrated in front of him.⁵⁴⁶

⁵⁴⁶ Justin Martyr, *Dialogus cum Tryphone Iudaeo*, 106, p. 724.

These associations are no doubt correct, or at least in agreement with Matthew's view. The double sense of *anatole* as "rising" and "sprout" also appears in Revelation 22:16:

Έγὼ Ίησοῦς ... εἰμι ἡ ῥίζα καὶ τὸ γένος Δαυίδ, ὁ ἀστὴρ ὁ λαμπρὸς ὁ πρωϊνός.

I, Jesus, ... am the root and the offspring of David, the bright morning star. (Rev. 22:16)

The "sprout" is the star, he "rises" and "sprouts" (*anatellei*). The close connection between "sprouting" and "rising" also appears in Isaiah 58:8-10:

אָז י**בָקע** כַּשֵׂחַר אוּרֶך וַאָרֵכָתָדָ מְהֵרָה תִ**צְמָ**ח 8

τότε ραγήσεται πρόιμον τὸ φῶς σου, καὶ τὰ ἰάματά σου ταχὺ ἀνατελεῖ,

(8) Then your light will break forth at the time of the dawn, and your healing will speedily shine forth (or: spring forth);

Returning to Zechariah, one could object that the translation:

הְנֵה־אָישׁ צֵמֵח שָׁמוֹ וּמִתַּחָתֵיו יִצְמָח

'Ιδού ἀνήρ, '**Ανατολὴ** ὄνομα αὐτῷ, καὶ ὑποκάτωθεν αὐτοῦ ἀνατελεῖ Behold, a man whose name is *Rising* (Zechariah 6,12f.)

is wrong and that the Hebrew noun *semah*, and thus also the Greek *anatolē*, should be rendered as "sprout" or "branch". As a matter of fact, this seems to be required by Hebrew dictionaries. In addition, all translations render the word like that, even translations of the Septuagint. However, according to Jastrow's dictionary, the Hebrew verb *sāmah*, from which *semah* derives, means "to break forth, shine; to bloom, sprout, grow".⁵⁴⁷ For this reason, it is quite likely that the noun *semah* could also mean "shining forth, rising". The Aramaic equivalent, *semhō*, means: "a) a sprout, shoot; b) brilliancy, radiance, effulgence, splendour, reflection".⁵⁴⁸

That these considerations are correct is proven by Isaiah 4:2. The Hebrew text reads:

פַּיָּוֹם ההוּא **יְהְיֶה אֱמֵח יְהוָה** לְצְבָי וּלְכָבָוֹד וּפְּרָי הָאָׂרֶז לְגָאָוֹן וּלְתִפְאֶׁרֶת לִפְלִיטַת יִשְׁרָאֵל:

This can be translated as follows:

In that day, *Yahweh's branch will be* beautiful and glorious, and the fruit of the land will be the beauty and glory of the survivors of Israel. (Isaiah 4:2; World English Bible)

Now the Septuagint renders it as follows:

Τῆ δὲ ἡμέρα ἐκείνῃ ἐπιλάμψει ὁ θεὸς ἐν βουλῆ μετὰ δόξης ἐπὶ τῆς γῆς τοῦ ὑψῶσαι καὶ δοξάσαι τὸ καταλειφθὲν τοῦ Ισραηλ

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⁵⁴⁷ Jastrow, A Dictionary of the Targumim, the Talmud ..., II, S. 1287.

⁵⁴⁸ Payne Smith, A Compendious Syriac Dictionary, S. 481.

In English, this means:

But on that day, *God will shine forth* with glory in the desire/ decision to exalt and glorify on earth what has remained of Israel.

"Horn" and "Lamp"

In the Old Testament, there are a number of verses in which a "horn" (*qeren*) is mentioned in a very unusual way. Repeatedly, a victory over enemies is described as a "lifting up of the horn" of a king or the people, and a defeat as a "breaking off of the horn". However, the Hebrew word *qeren* is ambiguous. It means not only "horn" but also "ray of light". This ambiguity is relevant in such places as is shown in the following verse from Psalm 132:

שָׁם אַצְמִיחַ קֶרֶן לְדָוִד עַרַכְתִּי נֵר לִמְשִׁיחִי

There a horn of David shall sprout; I have prepared a lamp for my anointed one. (Psalm 132:17)

The parallelism between "horn" and "light, lamp" $(n\bar{e}r)$ indicates that the double meaning of *qeren* as "horn" and "beam of light" recorded in dictionaries does apply here. The "horn of David" is a "light" and a "lamp". Since the verb $s\bar{a}mah$ also has ambiguous meaning, denoting both "to sprout" and "shine forth", the verse could also be translated as follows:

There, I shall let a light shine forth for David, I have prepared a lamp for my anointed one. (Psalm 132:17)

The astronomical connotation of the verse is confirmed by the Septuagint, which renders the verse as follows:

ἐκεῖ ἐζανατελῶ κέρας τῷ Δαυιδ, ἡτοίμασα λύχνον τῷ χριστῷ μου[.] There I will let a horn *rise* for David, I have prepared a lamp for my Christ. The Greek verb *(ex)anatellein* ("to rise" and "to cause to rise") associates the *anatolē* ("rising") of the Star of Bethlehem, although, admittedly, the Greek word *keras* never means "light", but always "horn".

This interpretation is further supported by the following verse, which mentions a shining crown or diadem of David. This crown or diadem obviously is identical to the "horn" and the "lamp" (Psalm 132:18):

ָאוֹיְבָיו אַלְבִּישׁ בָּשֶׁת וְעָלָיו יָצִיץ נִזְרוֹ:

His enemies I will clothe with shame, and upon him will his crown shine.

These verses actually refer to the "anointed one" ($m\bar{a}\bar{s}\bar{\imath}ah$) or Messiah. Here, this term is used for King David. However, the horn and light symbolism applies to all holy kings of Israel, and in particular, of course, to *the* Messiah. Luke refers to Jesus in just these terms, as the "horn of salvation" ($\kappa\epsilon\rho\alpha\varsigma$ σωτηρίας, Lk 1:69) and as "rising from on high" (ἀνατολὴ ἐξ ὕψους, Lk 1:78).

Thus, we should remember that "horn" = "lamp" in other verses that refer to a "horn". For example, Hannah prays:

עַלץ לבִּי בּיהוָה רָמָה קַרְנִי בַּיהוָה רָחַב פִּי עַל־אוֹיְבַי כִּי שָׂמַחָתִי בִּישׁוּעָתָדְ

My heart rejoices in Yahweh, my horn is raised up in Yahweh; My mouth is wide open over my enemies, for I rejoice in my salvation through you. (1 Samuel 2:1; cf. 2:10)

The raising up of the horn means salvation and victory over enemies, the destruction of the horn, defeat and doom. Although it is an old tradition that in all such instances, *qeren* is translated as "horn", and this is already the rendering chosen by the Septuagint, it could just as well also be rendered as "light".

Another example: Sirach praises David with the following words, according to the Septuagint:

ἐπεκαλέσατο γὰρ κύριον τὸν ὕψιστον, καὶ ἔδωκεν ἐν τῆ δεξιῷ αὐτοῦ κράτος ἐξᾶραι ἄνθρωπον δυνατὸν ἐν πολέμφ ἀνυψῶσαι κέρας λαοῦ αὐτοῦ.
(5) For he called upon the Lord, the highest; and he (: the Lord) gave strength to his right hand to defeat the strong man in war and raise up the horn of his people.
οῦτως ἐν μυριάσιν ἐδόξασαν αὐτὸν καὶ ἤνεσαν αὐτὸν ἐν εὐλογίαις κυρίου ἐν τῷ φέρεσθαι αὐτῷ διάδημα δόξης.

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(6) So they praised him among tens of thousands, honoured him with blessings of the Lord, while he received for himself the crown of glory.

ἐξέτριψεν γὰρ ἐχθροὺς κυκλόθεν καὶ ἐξουδένωσεν Φυλιστιιμ τοὺς ὑπεναντίους, ἕως σήμερον συνέτριψεν αὐτῶν κέρας.

(7) He subdued the enemies on every side, destroyed Philistines, his opponents, and *shattered their horn* till today ...

κύριος ἀφεῖλεν τὰς ἁμαρτίας αὐτοῦ καὶ ἀνύψωσεν εἰς αἰῶνα τὸ κέρας αὐτοῦ καὶ ἔδωκεν αὐτῷ διαθήκην βασιλέων καὶ θρόνον δόξης ἐν τῷ Ισραηλ.

(11) The Lord took away his sins and *exalted his horn* forever; and gave him the covenant of the kings and the throne of glory in Israel. (Sirach 47)

The Hebrew original text is unfortunately not extant. However, it is clear that Greek *keras* renders Hebrew *qeren*.

The double meaning of "horn" and "lamp" is also shown in the verb $q\bar{a}ran$. According to the dictionaries, it means (1) "to shine" and (2) "to have horns". For instance, when Moses comes down from the mountain carrying the tablets of the law, his face "shines" (קרן עור פָּנָין, Exodus 34 :30). However, in the Vulgate it says instead that he "had horns".⁵⁴⁹

In other Semitic languages, the same ambiguity of the root *q-r-n* does not exist. Akkadian *qarnu* and Arabic *qarnun* mean only "horn", not "light". All the more astonishing is the fact that in Sumerian, which is not related to any known language, the same ambiguity does exist. The Sumerian word si, like Hebrew *qeren*, can mean either "horn" or "light". In some cases, it is actually difficult to decide which of the two meanings is intended, e.g. in the following verse from a hymn to the Moon god Suen (Sîn) from the Ur III period:

si mul-mul su₃-ra₂-aĝ₂ an-na /šul\ [^dsuen ...]

... radiant *light* (or *horn*), splendour of the sky, youthful Suen...⁵⁵⁰

Addressed is the young Moon god, i.e. the first crescent. He is called a "radiant light" or "radiant horn". Or perhaps even both at the same time, because the new moon is a shining horn. Akkadian authors were also aware of it. E.g., the Moon god is also called the "lord of the horns" ($b\bar{e}l \, qarn\bar{t}$).⁵⁵¹

⁵⁴⁹ videntes autem Aaron et filii Israhel cornutam Mosi faciem timuerunt prope accedere (Exodus 34:30).

⁵⁵⁰ ETCSL 2.4.5.5,13 ("A hymn to Suen for Ibbi-Suen (Ibbi-Suen E)").

⁵⁵¹ CAD Q, 137 (qarnu 3a), R[evue d']A[ssyriologie e d'archéologie orientale] 12 91:7.

Another example of similar kind is found in a hymn to the Moon god Nanna:

$$(4) & (4)$$

(47) ^dnanna barag maḫ-zu /ba\-ĝar-ra

(48) gada mah keše₂ saĝ il₂ si mul suh₁₀-gir₁₁ nam-men[!]-na

Nanna, you who are installed on your lofty throne,

bind the lofty linen, lift your head, the shining *horn* (or *light*), the crown of rulership.⁵⁵²

And another example is given in the following lyrical verse from a hymn to king Shulgi:

am zid am gal-še3 tud-da-gin7 si-muš gu2-nu-me-en3

You are adorned with looped horns of light like a true wild bull that has been born to the great wild bull. 553

The term si-muš₃ usually means "beam of light". However, since there is talk of a bull, it must also refer to its horns. The association of light and horns might originate from the "horns" of the lunar crescent.

However, the Moon was not the only "light horn" among the Sumerians. In a late Babylonian bilingual (Sumerian and Akkadian) hymn to the goddess Inanna-Ishtar, the planet Venus is designated the "light" or "horn" (si) of the goddess:

祖 頃 マ 片 平 叶 頃 ビゴ レゴ レゴ ド 年 町 戸 近 ビゴ レゴ よる 年 頃 下 年 下 「「 国 レ 不 肖 片 団 軍 叶 ベ ベ エ ギ <u>軍 部 四 片 辺</u> 岸町 金冊 マ 戸 ki en-nu-un ^dsuen-na ^dutu-bi-da-ta **si-zu** gú hé-en-me-erme-re *itti massarti ša ^d Sîn u ^d Šamaš šarūrka lihnub*

May you let your *horn/light* (si) shine during the watch of the Moon god and the Sun god.⁵⁵⁴

Here, the "horn of light" of Ishtar must be the planet Venus. The Akkadian version renders the Sumerian word si as *šarūru*, which only means "radiation, splendour", however the Sumerian version does contain the ambiguity of the word. What makes this text particularly interesting is the fact that the Late Babylonian period, from which this text stems, ended with the conquest of Babylon by the Persians in 539 BCE. Jews in Babylonian exile could have seen this kind of text and been familiar with the association of "light" and "horn".

⁵⁵² ETCSL 4.13.5,47-48 ("A hymn to Nanna (Nanna E)").

⁵⁵³ ETCSL 2.4.2.4,29 ("Shulgi D").

⁵⁵⁴ Bruschweiler, p. 111 (Exaltation 2 III 32-36).

Akkadian texts also mention the "horns" of Venus, and it is stated that she has a "left horn" and a "right horn":

今天 不 王 世 今 不 王王 田 王 二 2 二 2

(4) *inūma Ištar ina qaran*(SI) *imittiša kakkabu iţhiši nuhšu ina māti [ibašš]i* If a star has come close to Venus at her right horn, there will be abundance in the country.

今月2日日日月月月天 李家子王子王子王子

(5) inūma Ištar ina qaran(SI) šumēliša kakkabu ițhiši lumnu ina [māti ibašš]i

If a star has come close to Venus at her left horn, misery will be in the country. 555

The text raises the question whether Mesopotamian stargazers knew about the crescent shape of Venus. Usually, it is only noticeable through binoculars or a telescope. However, individuals with very sharp eyes could perhaps see it with the naked eye. Near heliacal risings and settings, when the crescent form of Venus is most pronounced, the diameter of the planet's disk reaches almost 1 arc minute. Since people with very sharp eyes can discern two objects at an angular separation of 0.4 arc minutes, they should also be able to perceive the Venus crescent with the naked eye. It is possible, however, that the text only refers to the fact that a star is standing on the left or right side of Venus.⁵⁵⁶ Alternatively, the "left" and "right" horn could refer to Venus as the evening or morning star or perhaps to her maximum elongations as the evening or morning star. However, in the case of a lunar crescent or the crescent of a solar eclipse, the expression "left horn" or "right horn" seems to refer to the two "horns" of the crescent itself.⁵⁵⁷

Mesopotamian gods were often depicted with crowns made of bull's horns. These represented power and rulership. The Venus goddess Ishtar, who bestows royal power on her earthly lover or withdraws it from him again, is often shown with a crown of horns, and in literature she is compared to a wild bull⁵⁵⁸ and also associated with the constellation of the "Bull of Heaven" (GU₄.AN.NA).⁵⁵⁹. Like Ishtar, human heroes and kings were often compared to "wild bulls" and depicted with bull's horns on their heads.

It follows then that the symbolism of the "raising up of the horn" of Israelite kings and prophets, frequently mentioned in the Old Testament, is most probably derived from the heliacal rising of the morning star.

⁵⁵⁵ Akkadian text by D.K. based on: Reiner/Pingree, *Babylonian Planetary Omens*, Part Three, p. 179, K229+7935, Rev. ii, lines 4 and 5.

⁵⁵⁶ A similar passage uses the word idu(A), "arm, side", instead of qarnu(SI) (ibidem).

⁵⁵⁷ CAD Q 137f. (qarnu 3a, b).

⁵⁵⁸ ETCSL 1.3.2., 8 : am gal-gin₇ kur gu₂-erim₂-ĝal₂-la u₃-na ba-gub-be₂-en: "Like a great bull you prevail over the countries that are hostile".

⁵⁵⁹ E.g. in 6th Tablet of the Gilgamesh Epic.

The King as "Son of God"

In ancient times, the kings of Israel understood themselves to be "sons of God". This is evident in the royal psalms, which were later understood to apply to the Messiah.

2 יִתִיַצְּבוּ מַלְכֶי־אֶרֵץ וְרוֹזְנִים בוֹסְדוּ־יַחֵד עַל־יִהוָה וְעַל־מִשִׁיחו: ... 4 יושב בַּשֵׁמַיִם יִשָּׂחֵק אָדֹנֵי יִלְעַג־לַמו: 5 אז יִדַבֶּר אַלִימו באַפֿו וּבַחַרוֹנו יִבַהַלָמו: נאַני נסַכָּתִּי מַלְכָּי עַל־צִיּון הָר־קדָשִׁי: 6 7 אַסַפּרַה אֶל חֹק יָהוָה אַמַר אָלֵי **בִּנִי אַתַּה אַנִי הַיּוֹם יִלְדָתִּי**דָ: 8 שַׁאַל מְמַנִּי וָאָתַנה גויִם נַחַלֹתָד וָאָחזתָד אָפָסִי־אָרָץ: ... אַרעם בּשׁבט בּרזל כּכלי יוצר תּנפּצם: ... 9 12 נַשִּׁקוּ־בַר פֶּן־יֵאֵנַף וַתאֹבִדוּ דֵרֵךְ כִּי־יִבְעַר כִּמַעַט אַפֿו אַשְׁרֵי כַּל־חוסי בו: (2) The kings of the earth take their stand And the rulers take counsel together Against Yahweh and against His Anointed ... (4) He who sits in the heavens laughs, The Lord scoffs at them. (5) Then He will speak to them in His anger And terrify them in His blaze (hāron), saying, (6) "But as for Me, I have installed My King Upon Zion, My holy mountain." (7) I will surely tell of the decree of Yahweh: He said to Me, "You are My Son, Today I have begotten You. (8) Ask of Me, and I will surely give the nations as Your inheritance, And the very ends of the earth as Your possession. (9) You shall break them with a rod of iron, You shall shatter them like earthenware." ... (12) Do homage to the Son, that He not become angry, and you perish in the way, For His wrath may soon *be kindled* (*yib^car*) How blessed are all who take refuge in Him! (Psalm 2)

Incidentally, the word for "fury" (*hāron*) in verse 5 actually means "blaze, glow". Could this "blaze of fury" and its being "kindled" (*yib* '*ar*) in verse 12 allude to the morning star? Revelation 2:26ff. apparently corroborates this in quoting verse 9 from the above passage and adding these words: "and I shall give him the morning star".

In another psalm, King David is explicitly called the "anointed one" and "son" of God. The morning star here appears as the "horn":

21 מָצָאתִי דָּוִד עַבְדִי בְּשֶׁמֶן קָדְשִׁי מְשֵׁחְתִּיו: ... 24 וְכַתּוֹתִי מִפָּנָיו צָרָיו וּמְשַׂנְאָיו אֶגוּף: 25 נֶאֶמוּנָתִי וְחַסְדִּי עָמֵׁו וּבִשְׁמִי תָּרוּם קַרְנו: ... (20) I have found David My servant;
(20) I have found David My servant;
With My holy oil I have anointed him, ...
(24) But I shall crush his adversaries before him,
(24) But I shall crush his adversaries before him,
(25) My faithfulness and My loving kindness will be with him,
(25) My faithfulness and My loving kindness will be with him,
(25) My faithfulness and My loving kindness will be with him,
(25) My faithfulness and My loving kindness will be with him,
(25) My faithfulness and My loving kindness will be with him,
(27) He will cry to Me, 'You are my Father,
My God, and the rock of my salvation.'
(28) I also shall make him My firstborn,
The highest of the kings of the earth. (Psalm 89, NASB)

A further text in this category has been cited already:

עַמְּדְ נְדָבֹת בְּיום חֵילֶדָ בְּהַדְרֵי־לְדָשׁ מֵרֶחֶם מִשְׁחָר לְדָ טַל יַלְדָתֶידְ:

27 הוּא יָקֶרָאָנִי אֲבִי אֲתָה אֶלִי וָצוּר יִשׁוּעַתִי:

Your people will volunteer freely in the day of Your power; In holy array, from the womb of the dawn, Your youth are to You as the dew. (Psalm 110:3, NASB)

... whereas the same verse reads in the Septuagint:

ἐκ γαστρὸς πρὸ ἑωσφόρου ἐξεγέννησά σε.

from the womb, before the morning star, I have begotten you.⁵⁶⁰

It is apparent *that the birth of this "son of God" has to be symbolically equated* with the heliacal rising of Venus. And it is evident the same applies to the birth of Jesus. Further above in Psalm 2:7, when Yahweh says to his anointed one:

ַבְּנִי אַתָּה אֲנִי הַיּום יְלִדְתִּידָ:

You are my son. Today I have begotten you,

it means:

Today the morning star has stepped out of the radiance of the Sun.

A further example of this type has already been quoted from Isaiah:

הָעָם הַהֹלְכִים בַּחֹשֶׁךְ רָאוּ אור גָּדוֹל יֹשְׁבֵי בְּאֶרֶץ צַלְמָוֶת אור נָגַהּ עֲלֵיהֶם: ... כִּי־יֶגְד יֵלֵד־לְנוּ בֵּן נִתּן־לָנוּ וַתְּהִי הַמִּשְׁרָה עַל־שִׁכְמו ...

(2) The people who walked in darkness have seen a great light; upon those who dwelt in the land of the shadow of death light has shone. ... (6) For a child is born to us, a son is given to us and the reign rests on his shoulder...⁵⁶¹ (Isaiah 9:2; 6, NASB)

⁵⁶⁰ Septuagint, Psalm 109:3.

⁵⁶¹ The Masoretic standard text and an Isaiah scroll from Qumran continue as follows: "and his name is called: wonderful, counsellor, powerful god, father-forever, prince of peace". However, the Septuagint reads as follows: "and his name is called: Messenger (or angel) of the Great Wisdom".

This light has already been identified as the morning star. Christians interpret this passage as a prophecy of the birth of Jesus. However, according to Jewish perception it refers to the birth of Hezekiah, who was king of Judah around 700 BCE.

Such ideas were widespread in the ancient Orient. In Egypt, the pharaoh was perceived as the incarnation of Horus, and thus the son of the sun god Ra. In the religion of Akhenaton, there is even an analogy to the Christian concept of the trinity: Ra, Aton, and the King were looked upon as "one".⁵⁶² In one of Akhenaton's hymns to the sun god Aton, it says:

You are in my heart, and there is no-one who knows you except your son Nefer-khepru-Re Wa-en-Re (Akhenaton)". 563

In *Pyramid* and *Coffin Texts*, the king who died and who is about to resurrect is occasionally identified with the morning star at its heliacal rising. An example:

May you go forth as the morning star, may you journey on (*or:* as) the ship with the hedgehog prow. (PT 871 (Spell 461))⁵⁶⁴

The ship is explained by the prevalent concept of the sky being an ocean which the sun god and the star gods traversed in barques.

With this, we are now ready to unlock a further interesting account in the Old Testament, that is, the dream of Jacob's ladder:

ויַצָא יַעֲקֹב מִבְּאֵר שָׁבַע וַיֵּלֶך חָרָנָה: 10

(10) Then Jacob departed from Beersheba and went toward Haran.

ון וַיִּפְגַע בַּמָּלִום וַיָּלָן שָׁם כִּי־בָא הַשֶּׁמֶשׁ וַיִּקָּח מֵאַבְנֵי הַמָּלִום וַיָּשָׂם מְרַאֲשׁתָיו וַיִּשְׁכֵּב בַּמָּלִום הָהוּא:

⁵⁶⁴ cf. PT 805; 1366; 2014.

⁵⁶² Anthes, "Mythology in Ancient Egypt".

⁵⁶³ According to Geoffrey Graham's transcription of "The Great Hymn to the Aten". Cf. Pritchard, *Ancient Near Eastern Texts Relating to the Old Testament*, p. 371. *Wa en Re* means "The only (son) of the sun god". The two other names of Akhenaton's also show his great spiritual importance: *Akhenaton* means "Spirit of the disk of the sun"; *Nefer cheperu Re* means "Beautiful are the manifestations of the sun god".

Cf. Matthew 11:27: "All things have been handed over to Me by My Father; and no one knows the Son except the Father, and no one knows the Father except the Son and those to whom the Son chooses to reveal him." (Πάντα μοι παρεδόθη ὑπὸ τοῦ πατρός μου, καὶ οὐδεἰς ἐπιγινώσκει τὸν υἰὸν εἰ μὴ ὁ πατήρ, οὐδὲ τὸν πατέρα τις ἐπιγινώσκει εἰ μὴ ὁ υἰὸς καὶ ῷ ἐὰν βούληται ὁ υἰὸς ἀποκαλύψαι.)

(11) He came to a certain place and spent the night there, because the sun had set; and he took one of the stones of the place and put it under his head, and lay down in that place.

12 וַיַּחַלם וְהַנֵּה סֵלָם מֵצָּב אַרְצָה וְראשׁו מַגִּיעַ הַשָּׁמִיְמָה וְהַנֵּה מַלְאֲכֵי אֱלֹהִים עלים וִירָדִים בו:

(12) He had a dream, and behold, a ladder was set on the earth with its top reaching to heaven; and behold, the angels of God were ascending and descending on it.

13 וְהַגֵּה יְהוָה נִצָּב עֶלָיו וַיֹּאֹמֵר אֲנִי יְהוָה אֱלֹהֵי אַבְרָהָם אָבִידְ וַאלֹהֵי יִצְחָק הָאָרֶץ אֲשֶׁר אַתָּה שֹׁכֵב עָלֶיהָ לְדְ אֶתְנָנָה וּלְזַרְעָדָ:

(13) And behold, Yahweh stood above it and said, "I am Yahweh, the God of your father Abraham and the God of Isaac; the land on which you lie, I will give it to you and to your descendants.

... וְאֶכִּר הַאָרָץ וּפָרַצְתָּ יָמָה וָאֵרְמָה וְצָפֹנָה וָנֶגְבָה ... 14

(14) Your descendants will also be like the dust of the earth, and you will spread out to the west and to the east and to the north and to the south ... (Gen. 28:10-14, NASB, modified by D.K.)

Jacob is chosen by Yahweh to be the king over the country. Therefore, if the morning star is the symbol of kingship, this has to appear in some way in the text. At first glance, there is no mention of it; nevertheless it may be present. Perhaps, the ladder (on which angels move up and down), can be interpreted as an astronomical phenomenon. In the Bible, angels can stand for stars.⁵⁶⁵ The Egyptian *Pyramid* and *Coffin Texts* may give a clue here. They occasionally mention a ladder on which a king who has died ascends to heaven as the morning star.⁵⁶⁶ Could this ladder be the ecliptic on which planets go down and rise up? However, where in the text about Jacob's ladder is there mention of the morning star? Could it be Yahweh himself, who is also standing on the ladder (*Yahweh niṣṣab calayw*). At first sight, this view may appear weird. Yahweh, as the creator of stars, would surely not be a star himself? However, it will be seen that Yahweh is able to speak through "his angel". The morning star is the "angel of Yahweh".

⁵⁶⁵ Rev. 1:20; 9:1; Mt 24:29; Mk 13:25; Jude:13.

⁵⁶⁶ PT 352; 365; 773-4; 973-5; 980; 1108; 1431; 1586.

Abraham's Birth Star

In Rabbinic tradition, there are legends about Abraham's birth that are strongly reminiscent of Matthew's and Luke's accounts of the birth of Jesus. According to one of them, King Nimrod saw in the stars that someone had been born in his realm who would rise up against him.⁵⁶⁷ He ordered that all pregnant women go into a hall, and that all male children be killed immediately after their birth. 70 000 boys were killed. However, Emtelai, who was bearing Abraham, managed to hide her pregnancy. When the time came for her to deliver, she left the city and wandered into the desert, however staying near a river. She found a cave, entered it, and gave birth to her son. The boy's face shone so brightly that the cave was filled with light.⁵⁶⁸ In her despair, and believing that her child should rather die than be killed before her eyes, she abandoned young Abraham. However, by a miracle, milk flowed from his thumb, thus he was able to survive, and slowly he grew up.⁵⁶⁹

The parallels with Matthew and Luke are apparent. Nimrod's murder of the children reminds one of Herod's actions, the cave, of Bethlehem's stable – according to the gospel of James, it was a cave –, and the appearance of the light to the star of Bethlehem.

Another legend reads as follows:

מעסה כשנולד אברהם אבינו הלכו לפני המלך נמרוד ויאמרו לו אצטגניניו בן נולד לתרח קנה אותו ממנו ותן לו כל מה שירצה אמר להמ נמרוד מפני מה אתם אומרים כך ויאמרו ראינו שאותו יום שנולד קם כוכב אחד ובלע ארבעה כוכבים בשמים ונראה לנו שהוא עתיד לירש שני עולמים

⁵⁶⁷ The original text reads:

⁵⁶⁸ The original text reads:

⁵⁶⁹ Ginzberg, *The Legends of the Jews*, Vol. I, chap. V., p. 71f.

והיה זה המלך תוכן וחכם וראה בחכמת הכוכבים, שייולד אדם אחד בימיו שיעמוד כנגדו להכחיש אותו מאמונתו ולנצחו, ויחרד חרדה גדולה

[&]quot;And this king (namely Nimrod) was knowledgeable (?)* and wise, and he saw, using the wisdom of the stars, that in his days a man would be born who would rise up against him in order to contradict him in his religious convictions and to defeat him. And he was very worried." (D. K.)

^{*} The word הוכן usually means "content". However, here it seems to be an adjective and ought to somehow fit with הכם, "wise".

Hebrew text according to: Jellinek, Bet ha-midrasch, p. 25. Cf. Ginzberg, The Legends of the Jews, vol. I, chap. V., pp. 71f.

למחר אחזוה חבלי לידה, ותלד בן, ותראה את המערה כולה מאירה כשמש מאור פני הילד, ותשמח למחר אחזוה חבלי לידה, ותלד ב

[&]quot;On the next day, the pains of childbirth seized her and she gave birth to a son, and she saw the whole cave shining from the light of the face of the child, and she rejoiced with great joy."

When our father Abraham was born, astrologers came to King Nimrod and said to him: "A son has been born to Terah; acquire the child from him and give him anything for which he asks." Nimrod asked: "Why do you say that?" They answered: "We have seen that on the day he was born a star arose and devoured four stars in the sky, and it seems to us that he will take possession of two worlds."⁵⁷⁰

The version of the Sefer ha-yashar reads:

ויהי בלילה ההוא, עת הולדת את אברם, ויבואו כל עבדי תרח וכל חכמי נמרוד וכל חרטומיו ויאכלו וישתו בבית תרח וישמחו עמו בלילה ההוא. ויהי בצאת כל החכמים והחרטומים מבית תרח, וישאו את עיניהם השמימה בלילה ההוא אל הכוכבים ויראו, והנה כוככ אחד גדול מאד בא ממזרח שמש וירץ בשמים ויבלע ארבעה כוכבים מארבע רוחות השמים. ויתמהו כל חכמי המלך וכל החרטומים מהמראה ההוא, ויבינו החכמים את הדבר ההוא וידעו אודותיו. ויאמרו איש אל רעהו: אין זה כי אם הילד אשר יולד בלילה הזה לתרח, אשר יגדל ויפרה מאד ויירש את כל הארץ הוא ובניו עד עולם, והרג הוא וזרעו מלכים גדולים ויירשו את ארצם. וילכו ויבואו כל החכמים וכל החרטומים בלילה ההוא איש לביתו.

It was in that night, at the time of the birth of Abraham: All servants of Terah and all wise men of Nimrod and all his scholars came, and they ate and drank in the house of Terah, and they rejoiced with him that night. And when all the wise men and scholars left the house of Terah, in order to lift their eyes skywards to the stars that night, in order to see [these], behold, a very great star came from the rising of the sun (i.e. from the east), to run athwart the sky and swallow four stars from the four winds of the sky (i.e. the cardinal directions). And all wise men of the king and all scholars were astonished about this sight, and the wise men understood the message and knew its import. And they spoke one to the other: "This can only mean that the child that was born to Terah this night will become extremely great and will procreate. And he will take in possession the whole earth, he and his children forever, and he and his seed will kill great kings, and they will take in possession their land." And all the wise men and scholars went away, each one to his own house.⁵⁷¹

Thus, Abraham was born *at the same time* as a mighty star appeared in the east. Here, again, the morning star might be referred to.

Apparently, the birth of important kings was frequently associated with the heliacal rising of Venus. At the birth of Moses and that of Isaac unusual appearances of light were said to have taken place.⁵⁷² Therefore, since

⁵⁷⁰ Hebrew text according to: Chaim M. Horowitz, *Sammlung kleiner Midraschim*, erster Theil, Berlin 1881, 1,43. German translation also in: Strack, *Kommentar zum Neuen Testament aus Talmud und Midrasch*, Bd. I, pp. 77f.

⁵⁷¹ Hebrew text according to: *Sefer ha-Yashar*, ed. Dan Joseph, p. 19 (chap. 8). Cf. Beer, *Lebensgemälde biblischer Personen*, S. 1; Ginzberg, op. cit., pp. 79f.

⁵⁷² Strack, loc. cit.

ancient times there existed a special connection between Israel's kings and the morning star. The star indicated that God called them to be kings. This did not just apply to the Messiah, but to kings generally. In addition, it applied to Israel's prophets. In the morning of Job's birthday, the morning stars appeared. (Job 3:4-9)

Considering all the evidence found above, there can hardly be any doubt that Matthew's star must have been Venus. For early Christians the star of the Messiah was the morning star, and it had the function of announcing a coming day, a coming king and a coming kingdom. Because this symbolism is already present in the Old Testament and in Jewish tradition, doubts increase that Matthew's account of the star of Bethlehem could have been invented for the sake of old "prophecies" instead of being based on historical truth.

The Pillar of Fire and Cloud

As Moses led the Israelites through the desert, a pillar of fire and cloud moved ahead of them, and whenever it stopped, the Israelites set up their camp. (Numbers 9:17ff.). Does this moving ahead and standing still not remind one of the actions of the star that led the Magi to the place of the Messiah's birth? Could an ancient planet cult be behind this? Following this lead will be worthwhile.

For what kind of a pillar is this? In the *Theologisches Wörterbuch zum Alten Testament (Theological Dictionary of the Old Testament)*, interesting information is found under the Hebrew lemma ^cammûd (pillar), namely that the two bronze pillars at the entrance to the temple could be seen as "monumental lamp stands or incense burners, reminiscent of the cloud and fire pillar in exodus".⁵⁷³ According to this idea, a pillar or a post which had a fire burning at the top and which served to present incense offerings could be involved. At night, one would have seen them as fire, and during the day, as a cloud of smoke. Could this elevated fire have represented the morning star? Incidentally, the meaning of the Hebrew word $\bar{e}s$ is much wider than the word "fire". It can also mean "blaze" and "radiance".

The Easter candle of Roman Catholic and Lutheran liturgy can be seen in precisely this context. In the German Wikipedia, the following explanation is given:

It is considered as a pure offering to God and is the pillar of fire of the new covenant. For just as the Israelites passed through the desert and the Red Sea back then and followed the pillar of fire, Christians to-day enter the church on the night of Easter, following a burning candle, symbol of the risen Christ.⁵⁷⁴

⁵⁷³ Theologisches Wörterbuch zum Alten Testament, Vol. VI, p. 207f.

⁵⁷⁴ http://de.wikipedia.org/wiki/Osterkerze ; the German text reads:

This interpretation is found in the *Exsultet*, a praise to Christ that is sung in front of the Easter candle at the beginning of the night of Easter. Here, the Easter candle is associated both with the *pillar of fire* and with Jesus Christ as the *morning star*:

Hæc nox est, in qua primum patres nostros, filios Israel eductos de Ægypto, Mare Rubrum sicco vestigio transire fecisti.

This is the night, when once you led our forebears, the children of Israel, from Egypt and made them pass dry-shod through the Red Sea.

Hæc ígitur nox est, quæ peccatorum tenebras **columnæ illuminatione** purgavit.

Thus, this is the night that purified the darkness of sin through **the brightness of a column**.

••

In huius igitur noctis gratia, suscipe, sancte Pater, laudis huius sacrificium vespertinum, quod tibi in hac **cerei** oblatione solemni, per ministrorum manus de operibus apum, sacrosancta reddit Ecclesia.

Thus, through the grace of this night, O holy Father, accept the vespertine sacrifice of this praise, which in this solemn offering of **a candle**, through the hands of [your] servants from the work of bees, is given to you by the most holy Church.

Sed iam **columnæ** huius præconia novimus, **quam in honorem Dei rutilans ignis accendit**. Qui, licet sit divisus in partes, mutuati tamen luminis detrimenta non novit.

But now we know the praises of **this pillar**, **which for the honour of God is ignited by glowing fire**, which, although divided in many parts, yet does not know detriment of the light it imparts. ...

"Sie gilt als reine Opfergabe für Gott und ist die Feuersäule des neuen Bundes. Denn wie das Volk Israel damals durch die Wüste und durch das Rote Meer hindurchgezogen ist, indem es der Feuersäule folgte, so ziehen heute die Christen in der Osternacht in die Kirche ein und folgen der brennenden Flamme der Kerze, Zeichen für den auferstandenen Christus." Oramus ergo te, Domine, ut cereus iste in honorem tui nominis consecratus, ad noctis huius caliginem destruendam, indeficiens perseveret. Et in odorem suavitatis acceptus, supernis luminaribus misceatur. Flammas eius **lucifer matutinus** inveniat Ille, inquam, **lucifer**, qui nescit occasum Christus Filius tuus, qui regressus ab inferis, humano generi serenus illuxit, et vivit et regnat in saecula saeculorum.

So we ask you, oh Lord, that this candle which has been consecrated to the honour of your name, in order to destroy the darkness of this night, may last without going out. Receive it in the fragrance of loveliness, and let it mingle with the lights above. May the **morning star** (*lucifer matutinus*) find its flames, that **morning star**, I say, that knows no setting, your Son, Christ, who, returning from the dead, shone on mankind bright and fair and lives and reigns in all eternity.⁵⁷⁵

It is also interesting to note that Christ is to appear as lightning, and on a cloud, when He returns (Matth. 24:27 and 30; c.f. Luke 21:24 and 27). Could this, too, be a reference to the "pillar of fire" (or "pillar of radiance") and the pillar of cloud? And could the "lightning", too, be a reference to the morning star?

The pillar of fire and cloud is either God himself (Exodus 13:20; 14:24) or His angel (*mal'ak *elohîm*, 14:19-20; 23:20; 3:34; 33:2). Again, it should be noted that angels can stand for stars. That this "angel" travels ahead of the "army" of Israel (Exodus 14:19), shows it where to go, and leads it to victory over enemies reminds one of Assyrian texts that have been studied already. When the Assyrian king goes to war, the Venus goddess Ishtar journeys ahead of him, protects him, and brings victory for him.⁵⁷⁶

That the pillar of fire and cloud could be standing for the morning star is supported by Exodus 14, when the Israelites crossed the Red Sea ahead of the Egyptians. First it reads:

19 נַיָּסַע מַלְאָדְ הָאֶלְהִים הַהֹלַדְ לִפְנֵי מַחַנָה יִשְׂרָאֵל נַיֵּלָדְ מַאַחֲרִיהֶם וַיִּסַע עַמּוּד הָעָנָן מִפְּנֵיהֶם נַיַּעֲמִד מֵאַחֲרִיהֶם: 20 נַיָּבאׁ בֵּין מַחַנָה מִצְרַיִם וּבֵין מַחַנָה יִשְׂרָאֵל נַיָּהי הֶעָנָן וְהַחֹשֶׁדְ וַיָּאֶר אֶת־הַלָּיְלָה וְלֹא־קַרֵב זָה אֶל־זֶה כָּל־הַלָּיְלָה:

⁵⁷⁵ http://de.wikipedia.org/wiki/Exsultet, Translation D.K.

⁵⁷⁶ Vide quotation pp. 233ff.

(19) The angel of God, who had been going before the camp of Israel, moved and went behind them; and the pillar of cloud moved from before them and stood behind them. (20) And it came between the camp of Egypt and the camp of Israel; and there was the cloud along with the darkness, yet it gave light at night. Thus the one (army; D.K.) did not come near the other all night. (Exodus 14:19-20, NASB)

Translators do not agree on the precise meaning of verse 20. To begin with, it is clear that the occurrences described in this text happened in the evening. The pillar of fire and cloud, or the morning star positioned ahead of the Israelites that showed them the way, moves behind them in the evening. This can be interpreted to mean that the morning star turns into the evening star, and thus it moves from the east to the west, and starts to shine there in the evening. Of course, Venus cannot have moved to a position between the two armies. However, in a mythic text, astronomical occurrences need not be described accurately in all details.

Soon after that, the following happens:

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וִיְהִי בְּאַשְׁמֹרֶת הַבֹּקֵר וַיַּשְׁקָף יְהוָה אֶל־מַחֲנֵה מִצְרִיִם בְּעַמּוּד אֵשׁ וְעָנָן וַיָּהָם אֵת
מַחַנֵּה מִצְרָיִם:
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And it happened during the morning watch that Yahweh looked down on the army of the Egyptians in the pillar of fire and cloud and brought the army of the Egyptians into confusion. (14:24)

During the morning watch, the Egyptians suddenly see Venus ahead of them again. Thus, it has become the morning star once more. Their confusion can perhaps be explained by the fact that the star that served to orient them had again changed its position. Of course, Venus cannot appear as evening star and then again as morning star within 24 hours. However, every eight years Venus has its heliacal rising *before* its heliacal setting, and for a few days, it can be observed twice a day, in the evening as evening star and in the morning as morning star. This happens when Venus has a high ecliptic latitude around the time of its first morning appearance in sidereal Capricorn. In any case, it seems that an old Venus myth and Venus cult could be behind this story.

It is also possible that Moses' meeting with the "burning bush" could have been an encounter with the morning star. Let us carefully study the text:

1 וּמֹשֶׁה הָיָה רֹעֶה אֶת־צֹאן יִתְרו חֹתְנו כֹּהֵן מִדְיָן וַיְנְהָג אֶת־הַצֹאן אַחַר הַמִּדְבָּר וַיָּבא אֶל־הַר הָאֱלֹהִים חֹרֵבָה: 2 וַיֵּרָא מַלְאָך יְהֹוָה אַלָיו בְּלַבַּת־אֵש מִתּוֹך הַסְנָה וַיַּרָא וְהַנֵּה הַסְנָה בֹּעַר בָּאֲשׁ וְהַסְנָה אֵינְנוּ אַכָּל: ... 4 ... וַיִּקְרָא אֵלָיו אֱלֹהִים מִתּוּך הַסְנָה וַיֹּאמֶר מֹשֶׁה מַשֶׁה וַיָּאמֶר הָנֵּנִי:

(1) Now Moses was pasturing the flock of Jethro his father-in-law, the priest of Midian; and he led the flock to the west side of the wilderness and came to Horeb, the mountain of God. (2) The angel of Yahweh appeared to him in a blazing fire from the midst of a bush; and he looked, and behold, the bush was burning with fire, yet the bush was not consumed. ... (4) ... God called to him from the midst of the bush and said, "Moses, Moses!" And he said, "Here I am." (Exodus 3:1-4, NASB; modified D.K.)

It is immediately apparent that the text states once that it was the *angel* of Yahweh (*mal'ak Yahweh*) that appeared in the bush, and once that it was *Yahweh himself*. It is the same ambiguitiy seen with the pillar of fire that Moses and the Israelites were following when they left Egypt. Again, as has been stated, in the Bible angels can stand for stars. In addition, the word "fire" is the same one used for the pillar of fire, viz. \bar{es} , which does not necessarily mean earthly fire but also "brilliance". So is it the morning star that is referred to here, too? Is Moses witnessing the heliacal rising of the morning star behind a bush?

There is another indication that this interpretation may be valid. In the subsequent verses, Moses receives the command from Yahweh or his angel to lead the Israelites out of Egypt. Yahweh is choosing Moses to be, in effect, the king of the Israelites. It has been found that at the enthronement of a king, the morning star has to be present, and this principle has been successfully applied to Jacob's meeting with Yahweh on the ladder to heaven. Thus, the question must be asked where was the morning star when Moses was being called? It can only have been in the brilliance of the bush on Mount Sinai (Horeb). This is further confirmed by the following passage:

> יָהוָה מִסִינֵי בָּא וְזָרַח מִשֵׂעִיר לָמׂו הופִיעַ מֵהַר פָּארָן וְאָתָה מֵרְבְבֹת לְדָשׁ מִימִינֹו אֵשׁ דָּת לָמׂו

And Yahweh came forth from Sinai and rose $(z\bar{a}rah)$ from Seir for them; he shone forth $(h\bar{o}f\bar{t}^{a'})$ from Mount Paran and came from Ribbot Qodesh, from its right hand side: a fire (' $\bar{e}s$) of law for them. (Deuteronomy 33:2)

Sinai, Seir, Paran and Ribbot Qodesh⁵⁷⁷ are all names of the mountain on which Moses received his revelation. It is obvious that the text refers to the rising of a star above the mountain. At the same time, there is talk of the "fire of law", most likely another reference to the star. The fire in the bush was a star. It was Venus as the morning star.

Yahweh, the Lord of Hosts

Some of the evidence presented in the last few chapters can be summed up as follows:

- Yahweh, or "his angel", leads the Israelites in the form of a pillar of fire. This pillar of fire, possibly represented by a flame on a pole, is symbolic of the morning star. The "angel of the Lord" is the morning star.
- The king's victory in war is symbolically described by the "raising of his horn". The horn, too, is a symbol of royal power and represents the morning star.

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⁵⁷⁷ Ribbot Qodesh is rendered as "holy myriads" by most translators, which of course could refer to the stars, the "host of heaven".

 When Yahweh appoints a man to be king, he "begets" or "gives birth to" him as "his son". This "begetting" is associated with the heliacal rising of Venus.

Thus it is also likely that the expression "Yahweh, the Lord of Hosts" (יָקוָהוּ אָלֹהֵי צָּלָאוֹת; Yahweh "elōhē zebāōth) was initially associated with the morning star. The god of the morning star goes ahead of the army and leads it to victory. This was believed in the case of Mesopotamian kings, as has been shown. If one considers that Venus is the brightest of all the stars, and therefore their "king", the symbolism is convincing. Commentators are not certain whether the "hosts" refer to the Israelite army (for instance 1 Samuel 17:45) or the army of angels (for instance Psalm 148: 2f.). The term might be ambiguous, so that both apply. In other places, however, there is also talk of "the stars, the host of heaven" (בּכָּוֹכָבִים כָּל צָבֵא הַשָּׁלֵים); Deuteronomy 4:19; 2 Kings 23:4f.; 21:3 and 5).

The interpretation of "Lord of Hosts" as the morning star is supported by several texts in which Yahweh is called by this title. One of them is Isaiah 9:

ן הָעָם הַהֹלְכִים בַּחֹשֶׁךְ רָאוּ אור גָּלול יֹשְׁבֵי בְּאֶרֶץ צַלְמָוֶת אור נָגַה עֲלֵיהֶם: ... 5 כִּי־יָלֶד יֵלַד־לְנוּ בֵּן נָתַן־לָנוּ וַתְּהִי הַמְשְׁרָה עַל־שָׁכְמו ... 6 ... קְנָאַת יְהוָה צְבָאות מַעֵשֵׁה־זּאֹת:

(1) The people who walk in the darkness have seen a great light; upon those who dwell in the land of the shadow of death light has shone. ... (5) For, a child is born to us, a son is given to us and the reign rests on his shoulder... The zeal of *Yahweh of hosts* will do this. (Isaiah 9:2-7)

Here, the "light in the darkness" that has been interpreted as the morning star is apparently associated with "Yahweh of the Hosts". Furthermore, Psalms in praise of David that contain references to the morning star (Psalm 2; 89; 110) have been discussed. In one of them, "Yahweh, Lord of Hosts" (Psalm 89:8) is mentioned. In the following psalm, his appearance is connected with phenomena of light that seem to point to his morning-star-like character:

2 רֹעָה יִשְׂרָאֵל הַאֲזִינָה נֹהֵג כַּצֹּאֹן יוֹסַף יֹשֵׁב הַכְּרוּבִים הֹוּפִיעָה: ... 4 אֱלֹהִים 2 רֹעָה יִשְׂרָאֵל הַאֲזֹינָה נֹהֵג כַּצֹּאֹן יוֹסַף יֹשֵׁב הַכְּרוּבִים הוֹפִיעָה: 4 הַיָּהוֹה אֱלֹהִים צְבָאוֹת עַד־מָתַי שָׁשׁׁנְהָ בַּתְפַלַת הַשׁיבנוּ וְהָאַר פָּנֶיך וְנָוָשׁׁעָה: 5 יְהוָה אֱלֹהִים צְבָאוֹת עַד־מָתַי וּרָאָה וּפִקוֹד גַפָן זאֹת: עַמֵּך: ... 15 אֱלֹהִים צְבָאוֹת שׁוּב־נָא הַבֵּט מִשׁׁמַיִם וּרָאָה וּפִקוֹד גַפָן זאֹת:

(2) Oh, give ear, Shepherd of Israel, You who lead Joseph like a flock, you who are enthroned above the cherubim, *shine forth* $(h\bar{o}f\bar{i}^c\bar{a}h)!$... (4) O God, lead us back and cause your face to *shine* $(h\bar{a}\,'\bar{e}r)$, and we will be saved. (5) O Yahweh, God of hosts, how long will your anger *smoke* ($^c\bar{a}sant\bar{a}$, D.K.) against the prayer of your people? ... (15) O God of hosts, *turn again* ($s\bar{u}b$ $n\bar{a}$), we beseech you; *look down from heaven* (*habbēț miššāmayim*) and see, and take care of this vine ... (Psalm 80)

The requests "come and shine", "turn again" and "look down from heaven" sound like appeals to the morning star to reappear at long last. These are no more than hints, but, after all, this is a further remarkable part of the puzzle.

Thus, is Yahweh the morning star? Certainly, he seems to reveal himself occasionally in the presence of the morning star. However, this presence is also called the "angel of the Lord". The pillar of fire, too, was partly described as God himself, partly as his angel. Apart from this, the king of Israel was also regarded as the morning star. The heliacal rising of Venus was associated with the birth or the enthronement of the king. It seems that the Yahweh cult was linked to a very old cult of the morning star.

The Queen of Heaven, Ashtereth, and Asherah

The Yahweh-morning star cult was in competition with another Venus cult: It is reported that the Israelites turned away from Yahweh repeatedly and that they offered incense offerings to the "*Queen of Heaven*" (Jeremiah 7:18; 44:17ff.) or that they worshipped *Baal* and *Ashtereth*⁵⁷⁸ (Judges 2:13; 10:6; 1 Samuel 7:4; 12:10). The "Queen of Heaven" and Ashtereth (Astarte) are goddesses of Venus, who is called Ishtar in Mesopotamia. Her consort was called Baal or Baal Hadad. In Mesopotamia, he was known as the weather god, Adad-Ishkur, in the likeness of a bull, who also often appears as the companion of Ishtar-Inanna. In other places in the Old Testament, the Israelites are described bringing offerings to Baal and the goddess *Asherah*. The mere association of this goddess with Baal makes it probable that she is identical to Ashtereth.⁵⁷⁹ However, Asherah is not explicitly called a stargoddess. Usually, she is represented by a tree. However, Ishtar, too, although an astral deity, had her holy tree.

Interestingly, several parallels existed between the cult of Yahweh and those of Baal and Ashtereth. An important difference is that Yahweh did not permit images to be made of him, and he did not allow any deities beside him. However, apart from that they were very similar. Just as Baal had the likeness of a bull, Yahweh was also described as the "Bull of Israel" (Isaiah 1:24) or the "Bull of Jacob" (Genesis 49:24; Deuteronomy 33:17).⁵⁸⁰ Both had the characteristics of a weather god (Exodus 19:16; Psalm 65:9-14).⁵⁸¹ In the same way as with Baal, bulls were also offered to Yahweh (Exodus 29:10ff.; Leviticus 4:2ff.; 16:14; Judges 6:25f.; Ezekiel 45:18ff.). Yahweh's altar had four horns that were reminiscent of the horns of bulls.⁵⁸² The bronze basin

⁵⁷⁸ This might have been the true pronunciation of the name, which in the Bible is incorrectly vocalised *Ashtoreth*.

⁵⁷⁹ Etymologically the two names are not related. *Asherah* (אשרה) is written with an Aleph, *Ashtereth* (עשתרת) with an Ayin. This also holds for the Ugaritic forms of the names.

⁵⁸⁰ The word ^{*abīr*} is usually translated as "the Mighty One", but it also means "bull".
⁵⁸¹ Day, *Yahweh and the Gods and Goddesses of Canaan*, p. 91ff.

⁵⁸² Pictures of altars with horns are found in: Dever, *Did God have a Wife*?, p. 118; 141; 159.

before Solomon's temple was placed on the backs of twelve oxen (1 Kings 7:23-26). The sacrificial rituals for both gods were comparable (1 Kings 18:21ff.). Yahweh's symbol, or rather the symbol of Israel's victory in war, was the "lifting of the horn", which, as has been demonstrated, was the morning star. Because the word $ba^{c}al$ simply means "lord", Yahweh was also called "Baal". In order to avoid confusion, Yahweh found himself compelled to bar the Israelites from calling him "Baal" (Hosea 2:16f.). It is interesting that Baal was worshipped in Palmyra as $B\bar{o}l$ -castor. Thus, Baal was identified with the Venus god Athtar (Astor).⁵⁸³

Regarding Asherah, 2 Kings 23:7 shows that this goddess was temporarily worshipped in Yahweh's temple, or rather that women were there, weaving for this goddess. A glance at 1 Kings 18 is enlightening. Evidently, at the contest between Yahweh's prophet, Elijah, and the Baal prophets, Asherah prophets were also present. However, they were not part of the contest nor were they killed afterwards together with the Baal prophets. It has been concluded that the Asherah cult was not challenged at all.⁵⁸⁴

There is also archaeological evidence that sometimes, at least, Asherah was regarded as the "spouse" of Yahweh. There are explicit inscriptions on walls and vessels found near Kuntillet Ajrud in north-eastern Sinai, which originate from the 8th century BCE. They are votive inscriptions in Hebrew, but in Phoenician writing, honouring El, Baal, Yahweh and Asherah. Two of these inscriptions read as follows:

brkt 'tkm lyhwh šmrn wl'šrth I bless you before Yahweh of Samaria and his Asherah

brktk lyhwh tmn wl'šrth I bless you before Yahweh of Teman and his Asherah.⁵⁸⁵

Did Yahweh have a consort called Asherah? It has been argued that in Hebrew it was not usual to combine proper names with possessive suffixes ("his"). Therefore, when "*his* Asherah" was mentioned, that allegedly could not refer to a person or a goddess, but only to an object that had cultic meaning, or to a symbol, for instance, a "pole" or a "tree". However, this conclusion may be erroneous, and this author aligns himself with Dever's view.⁵⁸⁶ For, how could this tree "symbol" bearing the name of a goddess, who herself is represented as a tree, represent anything other than the presence of that goddess herself? Besides, it is not just in Hebrew, but common to most languages that proper names are not, or only seldom, combined with possessive pronouns. From the inscriptions quoted above, it would seem that

⁵⁸³ Lipiński, *The Aramaeans*, p. 612.

⁵⁸⁴ Zevit, The Religions of Ancient Israel, p. 652.

⁵⁸⁵ Pithos A and B from Kuntillet Ajrud, according to Zevit, *The Religions of Ancient Israel*, p. 390f. and 394f.; vide also Dever, *Did God have a Wife?*, p. 162f.
⁵⁸⁶ Dever, loc. cit., p. 198ff.

both Yahweh and Asherah each belong to a particular cult location. That means that each of these places had *its* own Yahweh, and each Yahweh *his* own Asherah, rather as we speak today of the Holy Virgin of Lourdes or Guadeloupe or of Einsiedeln, or as the Assyrians recognised an Ishtar of Nineveh and an Ishtar of Arbela. The use of possessive suffixes is thus impossible to avoid if speaking of a local Yahweh and "his" Asherah or a city's Asherah, although a proper name is referred to.

From all this it becomes evident motives of other near-eastern religions were present in the ancient religion of Yahweh. One imagines that the Yahweh morning star and royal cult traces back to the Ishtar-Venus royal cult. Originally, the morning star was the goddess Ishtar-Astarte-Asherah. The Venus goddess chose her king. In the case of the Israelites however, at some point Yahweh took on the role of the goddess, and Venus became *his* star. It was no longer the goddess, but Yahweh who chose the king. The king was no longer looked upon as the son of Ishtar but as the son of Yahweh. Finally, Christians interpreted those verses relating to the king as son of Yahweh as prophecies about Jesus, the Messiah.

Summary

In Revelation 22:16, Jesus calls himself the "bright morning star". Also, in 2 Peter 1:19, where "the morning star rises" in the heart of the believers, the star might represent Jesus or his second coming. Furthermore, it has been shown that the "rising from on high" in Luke 1:76, which "shines for those who dwell in the darkness" (cf. Matthew 4:16; Isaiah 9:1ff.), as well as the "light of the world" in John, which "shines in the darkness" (John 1:9; 8:12), must be an allusion to the morning star. The function and symbolism of the morning star turns out to be twofold: On the one hand it announces the "Day of the Lord", and on the other it is a kind of "sceptre" and a symbol of kingship (Rev. 2:26ff; Numbers 24:17).

Furthermore, it has been shown that the kings of Israel were considered to be "anointed ones" ($m\bar{a}\bar{s}\bar{\imath}ah$, Messiah!) and sons of God. In addition, it is often mentioned that God "causes the horn to sprout" of David or of somebody else, where the same expression could also be rendered as: "he causes his light to rise" (e.g. Psalm 134:17). Moreover, Yahweh or "his angel" loves to appear to his prophets as a luminous appearance in the sky, e.g. when he "rises" above Mount Sinai (Deuteronomy 33:2) or when he appears to Jacob on the celestial ladder (Genesis 28:10-14). It is obvious that all these instances also refer to the morning star. Moreover, the title "Yahweh, God of the hosts" seems to refer to some astral phenomenon, most probably to the morning star as the leader of all stars.

Interestingly, the Israelites repeatedly turned away from Yahweh and made incense offerings for the "Queen of Heaven" (Jeremiah 7:18, 44:17ff.) or

venerated *Baal* and *Ashteret* – i.e. Jupiter and Venus (Judges 2:13, 10:6, 1. Samuel 7:4, 12:10).

From all this, it becomes clear that the morning star played an outstanding part in the religion of ancient Israel. Yahweh himself or "his angel" appeared to Israel in the likeness of the morning star. Thus, this might be a relic of an old morning star and king cult, which is found in similar form in Mesopotamian cultures. Of all astral phenomena, Venus is by far the most likely candidate for the star of the Messiah.

The Date of the Birth of Jesus

Historical Truth or Fiction?

The last chapters may have clarified that the connection between Jesus, the Messiah, and the morning star must be seen in the context of an ancient morning star and royal cult that was practiced in many forms in ancient Israel as well as generally in all of the ancient Near East. For a king of Israel chosen by God, it was taken for granted that he had a special connection to Venus and, if possible, should have been born at her first morning appearance. Apparently, this also holds true for Jesus, if he was to be credible as the Messiah. Similarly, this applied to Shimon ben Kosiba, the leader of the Jewish uprising against the Roman emperor Hadrian in 132-135 CE. Due to his early successes many, among them Rabbi Akiba, believed him to be the Messiah. He was given the name Shimon bar Kokhba, that is, "Simon, the son of the star". Moreover, a star is depicted on coins of the Hasmonean kings Alexander Jannaeus (126-76 BCE) and Herod the Great.

Thus, one may surmise that the legend of the birth star of Jesus is nothing but a fiction to legitimise Jesus as the Messiah and that it provides no evidence of a historical date for the birth of Jesus. As a believing Christian, one can of course assume that God had deliberately ordained the birth on a date that would legitimise him as the Messiah from the point of view of the religious tradition. This author is not taking a stand here, however continues to use the *historical method* in what follows.

In any case, the legend of the birth star was a useful means for mission work in the entire world. In a way, it "proved" the significance of Jesus in salvation history for Jews as well as for Greeks, Romans, Egyptians, Chaldeans, and Persians. For Jews it was a convincing proof, because Old Testament texts associate the Messiah, and kings generally, with a rising star; for Persians, because their own prophecies of a Saoshyant, which also may have mentioned a star, seem to be fulfilled in Jesus; for Greeks, Egyptians and Chaldeans because Matthew apparently speaks of astrology. In addition, for the Chaldeans, Venus-Ishtar was the deity who made the "king of the world".

Nevertheless, although the Star of Bethlehem may be nothing but a fiction, it could still be useful to look for a concrete historical date that would correspond to the insights gained in the present investigation. For it is possible, in fact it seems obvious, that early Christian astrologers would have searched for a real date fitting the birth of the Messiah in order to legitimise Jesus as the Messiah. As Venus appears as the morning star only every 584 days, the number of potential dates for the birth of Jesus is rather limited. Therefore, this author will try to find such a date and to show that it was actually regarded as the date of Jesus' birth by early Christians.

Venus as the Star of Bethlehem - Older Theories

George Mackinlay

At the beginning of the 20th century, the Briton George Mackinlay arrived at the conclusion that the Star of Bethlehem must heave been Venus. He argued as follows:⁵⁸⁷ Tradition interprets Malachi 3:20 (4:2), where there is talk of the "Sun of Righteousness", as a reference to Jesus Christ. Accordingly, the "light that shines in the darkness" in the Gospel of John (1:9) and the "light of the world" (John 8:12) is also interpreted as an allusion to the Christ Sun. For this reason, Mackinlay believes that John the Baptist, who precedes Jesus and announces him, represents the morning star, who precedes the rising Sun and announces it. Mackinlay draws the conclusion that the morning star must have been visible when John the Baptist was born five or six months before Jesus, and again when John began his ministry at the age of about 30 years, shortly before Jesus did the same.

Furthermore, Mackinlay believes that the season in which Jesus was born is indicated by the fact that the shepherds were in the fields together with the sheep during the night of the birth. This allegedly was the case only in summer, when during the day it was too warm for the sheep to pasture. By contrast, in winter the sheep would have been in stables overnight. (cf. John 10:1) Moreover, from the fact that the holy family did not find overnight accommodation in Bethlehem, Mackinlay concludes that Jesus must have been born near a great festival, when a great number of people were in Jerusalem and her surroundings. This festival could have been the Feast of Tabernacles (Sukkot), which was celebrated on the full moon of the month of Tishri in September.

From all these clues and assuming that Jesus had to have been born before 4 BCE, the year of Herod's death, Mackinlay calculates that Jesus must have been born on 20 September 8 BCE. On this day, the morning star was visible in the eastern sky, but she had already appeared there more than five months earlier. Consequently, John the Baptist would have been born near a heliacal rising of Venus, which took place around 8 April. The reason why *this* heliacal rising of Venus in particular should have indicated the birth of the Messiah to the *magi* remains unclear.

As has been demonstrated, Mackinlay's view that John the Baptist represents the morning star and Jesus the rising Sun is not tenable (vide above, pp. 250ff.).

⁵⁸⁷ Mackinlay, The Magi: How they Recognised Christ's Star.

James George Frazer

Also at the beginning of the 20th century, the Scottish ethnologist and philologist George Frazer held the same view that the Star of Bethlehem must have been Venus as the morning star.⁵⁸⁸ He arrived at this conclusion firstly because of analogies between the Christian cult and the cult of Venus and Adonis, and secondly because Saint Jerome testifies that in the 4th century there was a sanctuary of Adonis in Bethlehem. In addition, the Roman historian Ammianus Marcellinus reports that a festival of Adonis was celebrated in Antioch at the time the "salvific star", namely the morning star, appeared.⁵⁸⁹ But Frazer did not try to determine the birth date of Jesus. In his view, the association of Jesus with the morning star was not based on Jesus' historical birth date, but only on mythical speculation. The festival of Adonis in Antioch was probably celebrated at every heliacal rising of Venus and was symbolically linked to the myth of Adonis and Venus. If Frazer is right, then early Christians transferred the myth of the dving and resurrecting god Adonis to Jesus, because they considered Jesus to be the *true* "Lord" ($\bar{a}d\bar{o}n = Adonis$), who died and resurrected. The idea of the rising morning star was transferred too. This is speculative, of course, and it has already become obvious that the idea of death and resurrection as well as the cult of the morning star formed part of several ancient mystery religions.

J. Noiville

Like Frazer, J. Noiville tried to prove in 1928 that the legend of the birth star of Jesus went back to a heathen cult of the morning star.⁵⁹⁰ However, his preferred candidate as a precursor is not the cult of Adonis, but the Nabatean cult of Dusares who, like Jesus, was allegedly born from a virgin and whose nativity was celebrated on 6 January, thus on Epiphany. Like Frazer, Noiville did not believe that the legend of the birth star of Jesus was based on historical fact, and for this reason, he did not try to determine the birth date of Jesus.

Bruce Killian

In Revelation 22:16, Jesus describes himself as "the bright morning star" (\dot{o} $\dot{\alpha}\sigma\tau\eta\rho$ \dot{o} $\lambda\alpha\mu\pi\rho\delta\varsigma$ \dot{o} $\pi\rho\omega\ddot{v}v\delta\varsigma$). Can there be any doubt, in the light of this statement, that Venus is the Star of the Messiah? Is it not surprising that so many authors are not even aware of this possibility? Another laudable exception is Bruce A. Killian.⁵⁹¹ He tries to embrace what the Bible says more literally than other authors, and he also arrives at the conclusion that the Star of the Messiah must have been Venus rising heliacally.

⁵⁸⁸ Frazer, Adonis, Attis, Osiris, pp. 157-159.

⁵⁸⁹ The text is quoted and discussed in the present work on pp. 307f.

⁵⁹⁰ Noiville, "Le culte de l'étoile du matin chez les arabes préislamiques et la fête de l'épiphanie".

⁵⁹¹ Killian, "Venus the Star of Bethlehem", http://www.scripturescholar.com/ VenusStarofBethlehem.htm. (3rd September 2013)

However, Killian does not believe that Jesus was born at a heliacal rising of Venus. Instead, he follows the church tradition, according to which the birth of Jesus must have taken place on 25 December 1 BCE. At this time, Venus was the evening star. Nevertheless, he maintains that heliacal risings of Venus played an important part in Jesus' biography.

According to him, the first of these risings of Venus occurred on 24 August 2 BCE. At the same time, Jupiter, Mars and Mercury formed a kind of *"sceptre"* in the area of the back feet of the constellation of Leo. Venus was not part of this "sceptre", since she had a very high southern latitude of 8°45'. In this "sceptre", Killian sees the fulfilment of the Balaam prophecy that "a star out of Jacob and a sceptre out of Israel" would rise up (Numbers 24:17). The sceptre was found at the feet of Leo and allegedly announced the arrival of the "king of all peoples" (Genesis 49:9f.). The Magi observed this celestial occurrence and knew that the time was near. In Killian's view, they expected the birth on 25 December 1 BCE (= year 0).

Three months after the birth of Jesus the next heliacal rising of Venus occurred. Killian dates it on 27 March 1 CE. This is supposed to be the day the Magi arrived in Bethlehem. Killian points out that this rising of Venus occurred in Aries and close to Passover, and that this denotes the "Lamb of God".

Up to this point, the following objections can be made:

- The idea that the Messiah was born only 16 months after the appearance of "his" star does not seem to accord with the statements of the Bible and other early Christian texts. As has been shown, early Christians believed that the star appeared *synchronously* with the birth of Jesus.
- Furthermore, it has been demonstrated that 25 December is not the historical birth date of Jesus but is based on mere astro-theological speculation. The traditional Christmas festival only appeared in the second half of the 4th century. Before that, the birth of Jesus was celebrated on different dates, e.g. on 6 January, on the vernal equinox, on Passover or even on other dates (vide pp. 28ff.).
- In fact, Venus and the "sceptre" were not yet visible before sunrise on 24 August. All of them were too close to the Sun to be seen. Even under the best possible atmospheric conditions, Venus appeared at the earliest on 27 August, Jupiter after 29 August, and Mars after 20 September. Mercury's morning last visibility was on 23 August, that is, it disappeared on this date and moved towards the Sun. Therefore, the Magi were never able to see the "sceptre".⁵⁹² Killian's theory therefore cannot be maintained.

⁵⁹² For the calculations, the program *Archaeocosmo* by Victor Reijs was used, which is based on Bradley Schaefer's theory. The extinction coefficient 0.15 was chosen for extremely excellent visibility. The facts can also be tested, using the free software

Nevertheless, Killian's approach to link the birth of Jesus with a heliacal rising of Venus is, in principle, correct, as this present work seeks to establish.



On the morning of 24 August 2 BCE, Venus made a heliacal rising, while Mercury, Mars, and Jupiter formed a "sceptre" at the feet of the constellation of Leo. Killian believes that this was the fulfilment of the Messiahnic prophecy Numbers 49:9-10. In reality, this configuration was not observable because it was too close to the Sun. The difference in altitude between Venus and the Sun was only 2°20', with an elongation (angular distance from the Sun) of 9°48'. The elongation of Jupiter was only 5°48'.

PLSV ("Planetary, Lunar, and Stellar Visibility", www.alcyone.de/PVis/english/ ; use Babylon as observation position.) If it is assumed that the magi had extraordinarily sharp eyes (e.g. Snellen ratio 2), they could have observed the heliacal rising of Venus one day earlier, on 26 August.

However, on 24 August a day-time observation of Venus would have been possible (vide Curtis, "Venus Visible during Inferior Conjunction"). A person with very sharp eyes (Snellen ratio 2) would have been able to observe it after it had risen higher than 18° above the horizon, for example, above a mountain range that covered the Sun, which stood 3° below Venus. However, strictly speaking, this was not a "heliacal rising" because the Sun was above the horizon. For Jupiter and the other planets, this kind of observation was not possible.

Also with the subsequent heliacal rising of Venus, one has to note that the date given by Killian is not correct. On 27 March 1 CE, Venus was too close to the Sun to be seen before sunrise. At the earliest, the Magi would have been able to see her on 2 April.

Similar mistakes are found in the dates of subsequent risings of Venus mentioned by Killian, for example during the days of the crucifixion in the year 33.

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"A Woman, Clothed with the Sun..."

John, the author of the Revelation of John, sees the following vision:

(1) Καὶ σημεῖον μέγα ὤφθη ἐν τῷ οὐρανῷ, γύνη περιβεβλημένη τὸν ἥλιον, καὶ ἡ σελήνη ὑποκάτω τῶν ποδῶν αὐτῆς, καὶ ἐπὶ τῆς κεφαλῆς αὐτῆς στέφανος ἀστέρων δώδεκα, (2) καὶ ἐν γαστρὶ ἔχουσα, καὶ κράζει ὠδίνουσα καὶ βασανιζομένη τεκεῖν.

(1) And a great sign appeared in the sky: A woman clothed with the sun, with the moon under her feet and on her head a crown of twelve stars. (2) And she is with child and wails aloud in labour and in pain as she gives birth. (Rev. 12:1f.)

The so-called *Woman of the Apocalypse* is traditionally identified with the Virgin Mary giving birth. For this reason, she plays an important part in the iconography of Catholic depictions of Mary. The Holy Virgin is often shown in a "garment of sun", standing on a crescent moon, as in the Albrecht Dürer sketch on the cover of this book.

Strictly speaking, this is only one of the current interpretations of this text, all of which are discussed in detail in M. Koch's book *Drachenkampf und Sonnenfrau* ("Dragon Fight and Solar Woman").⁵⁹³ There are the following interpretations:

- 1. The *mariological* interpretation, which is attested since Tychonius and Epiphanius (4th cent.), and according to which the woman represents Mary giving birth to Jesus.
- 2. The *ecclesiological* interpretation, which has been documented since Hippolytus of Rome (200 CE.). According to this, the woman stands for the church, "while the birth of the child is the continuous bringing forth of the Logos from the heart"⁵⁹⁴.
- 3. The *israelological* Interpretation, first mentioned by Augustine (400 CE): Here, the woman stands for the nation of Israel that brings forth the Messiah and Christianity.
- 4. The *end-time* interpretation: The woman is seen as the eschatological community.

The difficult question as to which of these interpretations is the most plausible one cannot be discussed here. However, the first interpretation is the most interesting for the present investigation. In fact, some of these interpretations can be combined. In particular, Mary could stand symbolically for both the church and the nation of Israel, and this would combine interpretation 1 with that of 2 or 3.

⁵⁹³ M. Koch, Drachenkampf und Sonnenfrau, p. 160ff.

⁵⁹⁴ M. Koch, loc. cit. p. 169: "während die Geburt des Kindes das fortwährende Hervorbringen des Logos aus dem Herzen bezeichnet".

It is obvious that the astronomical-astrological allusions in the text deserve to be investigated, and this author is, of course, not the first one to attempt this. Most of those who have attempted it interpret the woman as the *constellation of Virgo*. Among them are Franz Boll, Bruce Malina, and Ernest Martin,⁵⁹⁵ and they were not the first ones, either. It will turn out that astronomical interpretations of the Woman of the Apocalypse existed in ancient times, but that they were lost in the early Christian period and rediscovered only during the Renaissance.

However, the description given in Revelation 12 yields much more than that, as Martin has very impressively shown. If the Sun "clothes the woman", it means that the Sun is in Virgo and thus outshines Virgo and makes it invisible. The Moon is "under her feet", thus just in front of the constellation of Libra. Very probably, it relates to a new moon – and, as will be shown, to a Jewish New Year's day. The new contribution made by this author is this: The child to whom she is giving birth, viz. Jesus, would have to be the morning star at its first appearance in the eastern sky. It emerges from the brilliance of the Sun in Virgo and is "born", as it were.

This establishes clearly what one has to look for when searching for the date of Jesus' birth: namely a date that fulfils

(a) the condition set by Matthew 2, namely Venus in her heliacal rising;

(b) the condition set by Rev. 12: the Sun in Virgo and the Moon below her feet.

If such a date exists, this is an extraordinary coincidence and strong evidence for the correctness of the lead that this investigation has been following.

Heliacal risings of Venus take place on average every 584 days. Within the period when the birth of Jesus could have taken place, (between the year 7 BCE and 1 BCE), there were three heliacal risings of Venus. Either one could investigate all the years between 7 and 1 BCE and look for those dates when the Sun was in Virgo and the Moon below the feet of Virgo, or else one could look at the three heliacal risings of Venus during this period.

In fact there is a date, and only one, fulfilling both criteria, namely where firstly the Sun was in Virgo with the Moon at her feet, and secondly Venus had just made her heliacal rising. That was the case on **1 September 2 BCE** (= astronomical year -1). Therefore, on this day, in the morning, just before the rising of Venus, Jesus must have been born, at least in the opinion of early Christian astrologers.

⁵⁹⁵ Boll, *Aus der Offenbarung Johannis*; Malina, *On the Genre and Message of Revelation*; Malina and Pilch, *Social-Science Commentary on the Book of Revelation*. Among the researchers on the Star of Bethlehem, Ernest L. Martin interpreted the Woman of the Apocalypse as the zodiac sign of Virgo. However, Werner Papke believes that she represents a Babylonian zodiac sign called *Erua*, which is situated in the vicinity of *Coma Berenices*.
Depending on atmospheric conditions, the heliacal rising of Venus occurred in the days after 28 August 2 BCE. However, according to ancient astrological teachings, Venus had to be 15° away from the Sun in order to unfold the astrological influence of a "heliacal" planet.⁵⁹⁶ This condition was met on 31 August exactly, the evening before 1 September.

This astronomical interpretation of the Woman of the Apocalypse is by no means new. However, hitherto authors have apparently never noticed this concrete date. A sky map of the celestial configuration on this date is given on the next page.

⁵⁹⁶ Paul of Alexandria, *Eisagogika*, 14; in Schmidt's translation pp. 24ff. A divergent theory is found in Firmicus Maternus, *Mathesis* 2.9. In Firmicus' view, only Saturn is heliacal at an elongation of 15°, Jupiter already at 12°, Venus and Mars even at 8°, however Mercury only at an elongation of 18°. It is obvious that this scheme is not based on observation either, but on astrological "theoretical" considerations. Antigonus of Nicaea believed that a planet was heliacal already seven days before reaching an elongation of 15°. (Denningmann, *Die astrologische Lehre der Doryphorie*, p. 333ff.)





Sky map of 1 September 2 BCE: The Constellation of Virgo, "clothed" by the Sun, the Moon below its feet and the morning star that has just become visible. Of all planets, only Venus satisfied the ancient rule of thumb that an elongation of 15° is required for a planet to be visible. Similar configurations only appeared at the beginning of September 10 BCE and 7 CE. However, these dates cannot have been the birth date of Jesus, for historical reasons.



The astronomical situation is particularly well represented on the following 17th-century painting. It can serve as an illustration of the sky map.

Inmaculada Niña by *Francisco de Zurbarán*, about 1630. (*Museo Diocesano de Sigüenza*, Guadalajara, Spain). The morning star is found, astronomically correctly, on the right side above the left shoulder of the Virgin. When Venus rises in the time of Virgo, i.e. with the Sun in Virgo, it is indeed always situated on this side of Virgo. Furthermore, the crescent moon is, astronomically correctly, pointing down. This is a very precise representation of the celestial configuration on the star map on p. 290. The picture reveals astronomical expertise.

Returning to John's vision of the heavenly woman with the Sun, the Moon, and the stars, the question arises about how the rest of the text aligns with the proposed interpretation. First, there is the question of the twelve stars. If one counts those stars around the head of Virgo to be visible to the naked eye and if one adds the planets in the vicinity one might arrive at approximately 12.⁵⁹⁷ However, perhaps the number 12 has a different meaning here. Old tradition interprets the stars as the 12 zodiac signs. As Virgo is *lying* on the zodiac, the sign of Leo is standing on her head and in fact, the entire zodiac is so to speak on her head. In addition, Virgo was at the beginning of the year, in Hebrew *rosh ha-shanah*, that is, "head of the year".

John continues the description of his vision as follows:

(3) καὶ ὤφθη ἄλλο σημεῖον ἐν τῷ οὐρανῷ, καὶ ἰδοὺ δράκων μέγας πυρρός, ἔχων κεφαλὰς ἑπτὰ καὶ κέρατα δέκα καὶ ἐπὶ τὰς κεφαλὰς αὐτοῦ ἑπτὰ δια-δήματα, (4) καὶ ἡ οὐρὰ αὐτοῦ σύρει τὸ τρίτον τῶν ἀστέρων τοῦ οὐρανοῦ, καὶ ἕβαλεν αὐτοὺς εἰς τὴν γῆν. καὶ ὁ δράκων ἔστηκεν ἐνώπιον τῆς γυναικὸς τῆς μελλούσης τεκεῖν, ἵνα ὅταν τέκῃ τὸ τέκνον αὐτῆς καταφάγῃ. (5) καὶ ἔτεκεν υἰόν, ἄρσεν, ὃς μέλλει ποιμαίνειν πάντα τὰ ἕθνη ἐν ῥάβδῷ σιδηρῷ. καὶ ἡρπάσθη τὸ τέκνον αὐτῆς πρὸς τὸν θεὸν καὶ πρὸς τὸν θρόνον αὐτοῦ.

(3) And another sign appeared in the sky; it was a huge red dragon with seven heads and ten horns, and on its head were seven diadems. (4) Its tail swept away a third of the stars in the sky and hurled them down to the earth. Then the dragon stood before the woman about to give birth, to devour her child when she gave birth. (5) And she gave birth to a son, to "a male one", (viòv $\ddot{\alpha}\rho\sigma\epsilon\nu$)⁵⁹⁸ destined to shepherd all the nations with a rod of iron; and her child was caught up ($\dot{\eta}\rho\pi\dot{\alpha}\sigma\theta\eta$) to God and to his throne. (Rev. 12:3-5)

The description of the dragon seems to fit the constellation of Hydra. When Virgo has risen and is standing on the eastern horizon, then Hydra really "throws" its tail-stars to the earth. (See figure on p. 290, constellation "Hya"). The tail of Hydra does not really span a "third part" of the stars in the sky, however it is a very long figure indeed, stretching beneath four zodiac signs, thus over a third of the ecliptic.⁵⁹⁹ The seven heads adorned with diadems could be stars in the head area; the ten horns could be bright stars next to his body that form a zigzag shape. A precise identification is difficult, but the

⁵⁹⁷ Martin identifies the twelve stars as follows: π , ν , β , σ , χ , ι , θ , 60, δ , 93, β , ω , unfortunately omitting the names of the constellations which these stars belong to and which are usually required to unequivocally identify the stars. (Martin, *The Star that Astonished the World*, p. 98) Nicholl proposes a different list of stars. (Nicholl, *The Great Christ Comet*, p. 161.)

⁵⁹⁸According to Jeremiah 20:15, quoted from the Septuagint.

⁵⁹⁹ Boll, *Aus der Offenbarung Johannis*, p. 102. Dupuis identifies the dragon as the constellation of Draco near the celestial north pole. However, Draco was far away from Virgo, and its whole body except its head was circumpolar and therefore could not be thrown on the earth, as described in Rev. 12:9. (Dupuis, *Origine de tous les cultes*, vol. 6, 1st part, pp. 190f.)

number ten could also be meant symbolically.⁶⁰⁰ Apart from that, it would be wrong to expect that the features of the dragon could be precisely identified in the stars. The stars outline the creatures associated with them in a very rough fashion, and their figurative representations often show elements that cannot be seen in the sky. For the Greeks, the Hydra had nine heads and no horns.⁶⁰¹ However, in ancient Egypt and Mesopotamia, Hydra had only one head.⁶⁰² In fact, the constellation of Hydra is usually depicted with only one head. The figures associated with the constellations are not very precisely determined and have a lot of variation.

Neither Boll nor Malina identify the "son" with a constellation or a celestial body. However, the morning star seems to be a very suitable candidate. Not only is Jesus the "bright morning star" according to Revelation 22:16, but from an astronomical point of view, this solution also seems appropriate. Indeed, in the days after her "birth" Venus came close to the clutches of the Hydra and was thus in danger of being "eaten". However, after standing still, she moved away from the "dragon". The being "caught up" ($\eta \rho \pi \alpha \sigma \theta \eta$) of the child may suggest the fast ascent of the morning star. No other celestial body ascends the sky as fast as Venus does. For several months after that, Venus remained at a more or less constant distance from the Sun and during all this time could be observed in the morning before sunrise at about the same height above the horizon. One probably could compare the constancy of this position to a "throne" and a being "taken up". Hydra moved below the morning star and its throne and could not endanger it. The occurrence always takes place in a very similar way when Venus appears as the morning star in the time of Virgo.

Naturally, if the woman's son is Jesus, it should be possible to apply the occurrences described here to the life of Jesus. At first glance, this is not altogether easy, and it has been much discussed in the past. The question will be considered later in the chapter "Does Rev. 12 Accord with Jesus' Birth and Course of Life?" on pp. 338ff.

Although a bit inconspicuous, verse 5 also contains an undeniable clue to the morning star. It reads as follows:

⁶⁰⁰ According to Malina, the seven heads could be the seven stars that currently are counted as forming part of the constellation of the *Raven (Corvus)*; the ten horns on the body of the dragon he identifies as ten stars now seen as part of the constellation of the *Goblet* or *Cup (Crater)* (Malina, *Revelation of John*, page 172). However, how could the Raven have represented the head of Hydra when, according to Greek view, it is positioned near its tail?

⁶⁰¹ While Hercules fights the Hydra, a crab pinches his foot. The constellation of the Crab (Cancer) is near the head of the constellation of Hydra. The myth obviously has an astral background. (Apollodorus, *Library* II.v.2; Attic vase Louvre CA 598, http://www.perseus.tufts.edu/hopper/image?img=Perseus:image:1992.06.0485)

⁶⁰² In the famous zodiac of Dendera in Upper Egypt as well as on the cuneiform table VAT 7847 obverse, Leo stands on a snake with one head only.

καὶ ἔτεκεν υἰόν, ἄρσεν, ὃς μέλλει ποιμαίνειν πάντα τὰ ἔθνη ἐν ἡάβδῷ σιδηρῷ. And she gave birth to a son, to "a male one", destined to shepherd all the nations with a *rod of iron*. (Rev. 12:5)

This verse makes reference to Psalm 2:9. There, the "rod of iron" is a "sceptre of iron" (*šēbet barzel*, שֶׁבָט בֵּרְזֵל). Now, the "rod of iron" or "sceptre of iron" is also mentioned a bit earlier in the Revelation, and there it is associated or identified with the morning star:

(26) ... δώσω αὐτῷ ἐξουσίαν ἐπὶ τῶν ἐθνῶν (27) καὶ ποιμανεῖ αὐτοὺς ἐν ῥάβδῳ σιδηρῷ ..., (28) καὶ δώσω αὐτῷ τὸν ἀστέρα τὸν πρωϊνόν.

(26) ... I will give him authority over the nations, (27) and he will shepherd them with a *rod of iron*, ...; (28) ... and I will give him the *morning star*. (Rev. 2:27f.)

This statement is reminiscent of "the star out of Jacob, the sceptre (\tilde{sebet}) out of Israel" (Numbers 24:17).

From this, it can be concluded that the boy who is born in Rev. 12 carries the morning star as a "rod of iron" in his hand. Obviously, this star must be the Star of Bethlehem.

Johns vision in Revelation 12 continues:

(6) καὶ ἡ γυνὴ ἔφυγεν εἰς τὴν ἔρημον, ὅπου ἔχει ἐκεῖ τόπον ἡτοιμασμένον ἀπὸ τοῦ θεοῦ, ἵνα ἐκεῖ τρέφωσιν αὐτὴν ἡμέρας χιλίας διακοσίας ἐξήκοντα.
(7) Καὶ ἐγένετο πόλεμος ἐν τῷ οὐρανῷ, ὁ Μιχαὴλ καὶ οἱ ἄγγελοι αὐτοῦ τοῦ πολεμῆσαι μετὰ τοῦ δράκοντος. καὶ ὁ δράκων ἐπολέμησεν καὶ οἱ ἄγγελοι αὐτοῦ, (8) καὶ οὐκ ἴσχυσεν, οὐδὲ τόπος εὐρέθη αὐτῶν ἔτι ἐν τῷ οὐρανῷ. (9) καὶ ἐβλήθη ὁ δράκων ὁ μέγας, ὁ ὄφις ὁ ἀρχαῖος, ὁ καλούμενος Διάβολος καὶ ὁ Σατανᾶς, ὁ πλανῶν τὴν οἰκουμένην ὅλην – ἑβλήθη εἰς τὴν γῆν, καὶ οἱ ἄγγελοι αὐτοῦ ἐβλήθησαν.

(6) And the woman herself fled into the desert where she had a place prepared by God, that there she might be taken care of for twelve hundred and sixty days. (7) And war broke out in heaven; Michael and his angels battled against the dragon. And the dragon and his angels fought back, (8) but they did not prevail and there was no longer any place for them in heaven. (9) The huge dragon, the ancient serpent, who is called the Devil and Satan who deceived the whole world, was thrown down to earth, and its angels were thrown down with it. (Rev. 12:6-9)

The flight of the woman into the desert could symbolise the day movement of both constellations. Virgo describes a greater arc than Hydra, and thus it seems to be "evading the dragon". Their path proceeds from east to west, via south. Thus, the escape of the woman could be astronomically explained. Does the "desert" or "lonesome desolate place" ($h\bar{e} \ er\bar{e}mos \ [ch\bar{o}ra]$) also have an astronomical explanation? Not necessarily. It may just refer to the "loneliness" and "desolation" of the mother who has lost her child, or of Israel or the disciples who have lost their leader. Mourning and traumatic experiences are often accompanied by the feeling of loneliness and desolation. In the state of mourning, the human being also likes to "flee" into solitude

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and seclusion.⁶⁰³ An astronomical explanation of the "1260 days" that the woman spends in solitude based on the motions of the constellations and planets is difficult. However, the number corresponds to the number of days in half a year week.⁶⁰⁴ It also appears in the prophecies of Daniel (Dan 7:25; 12:7).

Does Archangel Michael, who overcomes the dragon, also represent a constellation? An old tradition depicted Michael as a lion or with a lion's head.⁶⁰⁵ When Virgo is standing above the eastern horizon, then Leo is located just above her and turns his head towards the head of Hydra. The two constellations move across the sky as if Leo were wrestling Hydra down.

In the course of its movement over the visible sky, Hydra finally falls to earth, head first, while Virgo moves through its larger arc and remains visible in the sky. In the continuation of the vision, which need not be quoted here, the woman is given two wings to flee to her place of safety a little further to the west, while Hydra sinks below the horizon. Hydra spits water after her. However, the water is swallowed by the earth together with the Hydra and does not reach the woman. ⁶⁰⁶

⁶⁰³ Note the expression ἔρημα κλαίω, "I weep in solitude", Euripides (Supplices 775).

⁶⁰⁴ In the context, 42 months are mentioned (of 30 days each), which also amounts to 1260 days, as well as "a time and times and half a time", which can be interpreted as 3½ years. Probably half of a seven-year period is meant, i.e. half of a "year week". (according to D. Bauer, *Das Buch Daniel*, p. 216). Now, 3½ years are 1277 days, or 1239 days, if based on a lunar year. However, if a schematic year of 360 days is used, then 3½ years correspond to exactly 1260 days. The year of 360 days is very convenient for calculation purposes. Mesopotamian astronomers used it for intercalation, in combination with celestial observations. The method is described in the cuneiform astronomical compendium ^{MUL}APIN. The ancient Egyptian (as well as even the present-day Coptic) calendar consisted of 12 months of 30 days each, which was very convenient for accounting and scheduling. The five missing days were appended at the end of the year but actually were not considered as belonging to the year. (Egyptian *hrjw rnpt* = Greek ἐπαγομέναι = "[days] that are added to the year".) The 360-day year is still used in the interest bill as the so-called "interest year".

⁶⁰⁵ This tradition is attested in a ritual diagram of the Gnostic sect of the Ophites (Origen, *Contra Celsum* 6,30). This sect appeared in the 2nd century CE at the latest. Michael might represent the constellation Leo, and not, as Dupuis believes, the constellation Hercules, which is far away from Virgo and Hydra. (Dupuis, *Origine de tous les cultes*, vol. 6, 1st part, p. 191)

⁶⁰⁶ Dupuis believes that this water is the celestial river Eridanus. For during the time Virgo rises, Eridanus sets and is swallowed by the earth. (Dupuis, *Origine de tous les cultes,* vol. 6, 1st part, pp. 187f.) Unfortunately, this interpretation does not accord with John's description. The text states that the dragon, after being thrown on the earth, spits water after the woman, which then is swallowed by the earth. However, Eridanus already sets *before* Hydra. In addition, as seen from Hydra, Eridanus is not located in the direction of Virgo, but in a different place and seems to be unrelated to her.



The morning star in Bethlehem on 1 September 2015, a few days after its heliacal rising, seen to the left from the road that comes from Jerusalem.



Nativity Church with morning star as seen by the arriving *magus*. The view resulted almost automatically from the topography and the course of the road. The position of Venus relative to the horizon was similar to 1 September 1 BCE.

Born on New Year's Day

In the previous chapter, a date has been found for the birth of Jesus that agrees very well with the statements in the Bible. It is 1 *September 2 BCE*. *(astronomical year -1)*.⁶⁰⁷ When this date is converted to the Hebrew calendar⁶⁰⁸, it turns out that it is the 1st of Tishri, that is, New Year's Day of the Jewish Year 3760.⁶⁰⁹ This is a remarkable discovery. Jesus' birth on New

⁶⁰⁷ It is a strange coincidence that Papke arrives at a similar date of nativity as this author does, though following quite a different route. According to him, Jesus would have been born two days earlier, in the evening of 30 August 2 BCE. As mentioned, Papke neither identifies the Woman of the Apocalypse with Virgo nor the star of Bethlehem with Venus. In his view, the woman is a Babylonian constellation named *Erua*, which is situated between Leo and Virgo and has its head in the constellation of the Hunting Dogs (*Canes venatici*). The star of the Messiah was allegedly a supernova in the lap of Erua in the constellation of the *Hair of Berenice* (*Coma Berenices*). Vide this author's explanations on p. 131.

⁶⁰⁸ A few remarks about the Hebrew calendar: Unlike the Gregorian calendar used in the Christian world, it does not work with years of 365 days and intercalary days, but with lunar months that always begin with the first appearance of the crescent moon after new moon. As twelve lunar months are clearly shorter than a year, a leap month has to be inserted seven times in 19 years to keep the months roughly consistent with the solar year. The days of the Jewish calendar always begin at sunset, not at midnight.

⁶⁰⁹ In the *current* Jewish calendar, which was introduced in 359 CE, the earliest date on which the Jewish New Year (Rosh Hashanah) can fall is 5 September. Because the average Jewish year length is slightly longer than the Gregorian year, present-day Jews celebrate their holidays on average 8 days later than did their ancestors in the 4th century CE.

In Biblical times, however, the calendar rules were different. The month of Nisan or Abib began in March after still green, but almost ripe, barley ears (Abib barley) had been found in the country. If no such ears were found by the end of the month of Adar (February/March), an intercalary month, Adar II, had to be inserted. The barley usually enters the Abib stage around late February to early March. (www.triumphpro. com/year-new-look-at-beginning-of.pdf) In the year 2 BCE, there was a new moon on 7 March (= 5 March Greg.). It is likely that barley ears in Abib stage were found by then and that therefore it was the 1st of Nisan. If so, the 1st of Tishri began in the evening of 31 August and ended in the evening of 1 September.

Using conventional software for calendar conversion, one ends up with an error of three days for the beginning of the month. For the present investigation, the current calendar algorithm, which does not determine the new moon correctly, is irrelevant. In antiquity, the months had to begin, ideally, on the day the first sliver of moon was observed after the dark moon. If the crescent appeared at the end of the 29th day at sunset, then this was considered the 1st of the new month. Otherwise, the new month began one day later, even if the crescent could not be observed, e.g. because of bad weather. Usually, months had either 29 or 30 days, but never more than 30 days.

Year's Day makes perfect sense, symbolically. It seems to confirm that the Bible verses from which this date was derived have been interpreted correctly. Still, there is the suspicion that this is an early Christian fiction. Would this birth date not be too good to be true?

The Jewish New Year is called *rosh ha-shanah* in Hebrew, which means "the head of the year". For the significance of this day, Papke can be quoted, who also believes that Jesus was born on the first day of this year:

... the New Year's Day ... is also called *Yom teru*^c*a*, "day of blowing the trumpets" in the Old Testament (Leviticus 23:23-25). On this day, the Jews remembered the creation of the world, but the day was also seen as the symbol for the future rising of the dead and the beginning of the rule of Messiah as king of kings. The kings of Judah, too, regarded this day of the year of their enthronement as the actual beginning of their reign. Thus, the birth of Jesus on the 1st of Tishri symbolically pointed to a renewal of the world through the reign of Messiah, king of Israel.⁶¹⁰

It is particularly interesting that, in Jewish thinking, this day was linked to the last judgment, and that is exactly the theme of the Revelation of John. The Woman of the Apocalypse in Revelation thus accords very well with the 1st of Tishri. Moreover, a connection with Mesopotamian cultic calendars becomes apparent. The name of the month Tashritu (= Tishri) literally means "beginning". For instance, in Uruk, the home city of Gilgamesh, the beginning of the year on the 1st of Tashritu was celebrated with the so-called Akiti-festival. This day was connected with rites during which the king was "stripped" of his power and was re-appointed to his office. In addition, as already stated, the goddess Ishtar, who on these occasions took the king into her bed, as child or as husband or both, played an important part. Thus, the birth of Jesus on the 1st of Tishri signifies symbolically his institution as king of the world.

Werner Papke takes the 1st of Tishri 2 BCE to have been on 30 August rather than 30 August. However, at sunset of that day the Moon stood only 2°14' above the horizon with an azimuth difference between Sun and Moon of barely 12°. Even under the most favourable atmospheric conditions, it would not have been possible to see it. (Caldwell & Laney, *First Visibility of the Crescent*, www.saao.ac.za/~wgssa/as5/caldwell.html) In reality, the new crescent, and thus the 1st of Tishri, occurred one day later, on 31 August, thus on the evening before the date this author found for the birth of Jesus.

⁶¹⁰ Papke, *Das Zeichen des Messias*, p. 104: "... der Neujahrstag ... wird im Alten Testament (Leviticus (3. Mose) 23,23-25) auch *Yom teru'a* genannt, "Tag des Posaunenblasens". An diesem Tag erinnerten sich die Juden an die Schöpfung der Welt; aber der Tag galt auch als Sinnbild für die zukünftige Auferstehung der Toten und den Antritt der Herrschaft des Messias als König aller Könige. Auch die Könige Judas betrachteten diesen Tag im Jahr ihrer Inthronisation als den eigentlichen Beginn ihrer Herrschaft. So wies die Geburt Jesu am 1. Tischri zeichenhaft auf die Erneuerung der Welt durch die Herrschaft des Messias, des Königs von Israel, hin."

It follows that on Jesus' birthday, Jews thought of both the beginning and the end of the world. This agrees with the following statements made by Jesus in the Revelation:

Έγὼ τὸ ἄλφα καὶ τὸ ὦ, ἡ ἀρχὴ καὶ τὸ τέλος. I am the Alpha and the Omega, the beginning and the end. (Rev. 1:8; 21:6) ἐγώ εἰμι ὁ πρῶτος καὶ ὁ ἔσχατος. I am the first and the last. (Rev. 1:17; 2:8)

The birth of Jesus on the 1st of Tishri at the time of the *autumn new moon* would also be very appropriate because the date of his birth would then complement the day of his death. The Bible gives the date of his death as being specifically on the day before Passover, which was celebrated on the *spring full moon*. Since the two dates ideally fall on or near the equinoxes, Jesus would have been born in the month in which darkness prevails against light (the autumnal equinox), and would have died in the month in which light prevails over darkness (the spring equinox). Interestingly, the traditional Christian nativity on 25 December is also positioned near to an important point in the seasonal cycle, that is, on the winter solstice. The date the present work has arrived at for the birth of Jesus is thus symbolically, even if not historically, a very plausible one. As has been stated earlier, this kind of nativity is based on nothing but calendar speculation and calendar mysteries.

... before Sunrise

Is it possible to determine even the time of day at which Jesus was born, at least in the opinion of Biblical authors? Jesus' birth was associated with the heliacal rising or "birth" of the morning star out of the glare of the Sun. Therefore, a consistent point in time for the birth of Jesus would be the time *just before sunrise, at the first appearance of Venus.* Thus, the complete date would read:

1 September 2 BCE, at 4:30 a.m. local time, Bethlehem.

However, in view of the tenets of Greco-Egyptian astrology one could query the time of day. The heliacal rising of a planet was not only considered to be astrologically effective in the hour it happened, but for the whole day and even over several days.⁶¹¹ Although the date itself stands firm because it is unequivocally determined by the first sliver of the Moon, the time of day may be called in question. Are there any clues in the Bible?

The description of the Woman of the Apocalypse in Revelation 12 does not seem to give a clear answer. Initially, it is stated that the Virgin "appeared" ($\check{\omega}\phi\theta\eta$), thus rose on the eastern horizon. Further, it says that she was giving birth to a son. It has been found that this son must have been the morning

⁶¹¹ More information on this can be found in the chapters on astrology pp. 376ff.

star. It is difficult to decide whether the text aims to specify the *hour* of the birth or simply the *day* of the birth to be concurrent with the first rising of the morning star. But if John possessed knowledge of astrology and wanted to indicate the birth horoscope of Jesus, then the time of day must also be indicated, since without the time of day a horoscope is far less valuable. For this reason it must be assumed that the appearance of Venus does, in fact, show the moment of birth. When studying Biblical texts that relate to the first morning appearance of Venus, there is no doubt that this hour precisely was regarded as especially holy.

As has been seen, 2 Peter 1:19 says:

- ... ἕως οὗ ἡμέρα διαυγάσῃ καὶ φωσφόρος ἀνατείλῃ ἐν ταῖς καρδίαις ὑμῶν
- ...until the day dawns and the morning star rises in your hearts.

Certainly, this would have been a suitable time for the birth of a king or Messiah.

Possibly, one could also read another birth hour into Revelation 12. John not only describes Virgo rising, but he also sees the Moon at her feet. Does this mean that the birth took place at a time when the Moon was above the horizon? That would have been the case at 8:30 a.m. local time, and thus Jesus would not have been born during the night but in the daytime. The fact that this configuration could not be observed does not matter here. A natal horoscope does not show only planets and zodiac signs that were observable at the time of birth. However, John could have mentioned the Moon simply in order to fix a date. Therefore, it is not imperative that a birth hour is derived from his mentioning the Moon.

At this point the Gospel of Luke is a help. Initially in chapter 2, Luke describes the birth of Jesus. Immediately after that, he states that there were shepherds watching their flocks by night and that a shining angel appeared to them. The angel announced that "today a saviour has been born who is Christ, the Lord" (ἐτέχθη ὑμῖν σήμερον σωτὴρ ὅς ἐστιν χριστὸς κύριος). As in ancient Israel days were considered to begin at sunset, Jesus must have been born during the night. Jesus was born on this day, but the Sun of this day had not risen yet.

In the Bible, angels can be represented by stars (e.g. Rev. 1:20). Later, it will be found that the shining angel who appeared to the shepherds is none other than the star of Bethlehem, the morning star.⁶¹² It then follows that Jesus was born just before the appearance of the morning star. Thus, 4:30 a.m. as the time of birth is entirely plausible.

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⁶¹² In the chapter "Luke and the Star of the Messiah", pp. 347ff.

Astronomical Interpretations of Revelation 12

The date of Jesus' birth that has been found in the last chapters rests in the main on an astronomical interpretation of Revelation 12. Indeed, for an astronomer the interpretation of the Woman of the Apocalypse as an astronomical configuration on the evening of the Hebrew New Year is rather obvious, and it is by no means new. However, it does not seem to have been in circulation for very long, and important authors on the Revelation of John do not take it into account at all. The main reason for this seems to be a psychological block amongst theologians who ignore astronomical, astrological, and astral-mythological aspects of Biblical texts altogether. The situation has not really changed since the "Babel and Bible" debate early in the 20th century, which finally resulted in astral-mythological interpretations of biblical texts being regarded as dubious.⁶¹³

Franz Boll (1914) and Bruce Malina (1995) held the view that the Woman of the Apocalypse was to be identified with the constellation Virgo. That Revelation 12 refers to the Jewish New Year new moon was considered by Nikolaus Morosow (1912), Werner Papke (1995), and Ernest L. Martin (1996), the latter two in their books on the Star of Bethlehem.⁶¹⁴

Martin, too, determines the birth date of Jesus using Revelation 12.⁶¹⁵ In fact, he interprets the text very similarly to this author does. He also locates the Sun in the constellation of Virgo so that its light "clothes" Virgo, and the New Year's moon is positioned at her feet. However, Martin chooses the New Year of the previous year, namley 11 September 3 BCE. He arrives at the year 3 BCE because of Augustus' census and because Jesus was allegedly about 30 years old in the 15th year of Tiberius. However, as has been shown, the interpretation of these facts mentioned in the Bible poses problems. For Papke, for instance, the same facts are in agreement with a birth on the Jewish New Year 2 BCE. Unfortunately, it is hard to determine which solution is better from an historical point of view.

However, the star chart that emerges for this date may help here. According to Martin, Revelation 12 has to be interpreted thusly: Jesus was born in the evening of the first appearance of the new moon after sunset. The following diagram shows Virgo with the Sun, the Moon, and the planets a few hours earlier, in the late afternoon of 11 September 3 BCE. At that time the zodiac sign just begins to set, head first.

⁶¹³ For further information, vide Klaus Johanning, Der Bibel-Babel-Streit.

⁶¹⁴ The sources are found in the bibliography at the end of this book.

⁶¹⁵ Martin, The Star that Astonished the World.



The Woman of the Apocalypse on 11 September 3 BCE, just before her setting on the western horizon. Ernest L. Martin holds that Jesus was born on this evening, shortly after sunset. (Software: Skymap Pro 11)

The chart demonstrates impressively why an evening birth is out of the question:

- If a morning birth is chosen, Virgo *stands* upright above the horizon. At an evening birth, she is lying diagonally with the head pointing down. The same applies to the dragon. The threat to Virgo and the child by the dragon in front of her is more comprehensible in the morning chart.
- Virgo is just setting. However, in Revelation 12 it states that "a great sign appeared in the sky" (ὥφθη, apparuit)." This manner of speaking indicates a rising, and thus a morning. About the dragon, Revelation 12:3 says that he "appears" (ὥφθη, apparuit). This, too, seems to refer to a rising.

It therefore seems that Revelation is referring to a *morning rising* of Virgo and that Jesus was born in the morning. This is already indicated in Matthew. The birth of the Messiah is shown by the heliacal rising of "his star".

It is not just the time of day assumed by Martin but also the actual day he chose that does not seem to fit. What is missing is the heliacal rising of "his star." It is of some interest that around that date Venus made its *last morn*-

ing rising.⁶¹⁶ Matthew does *not* seem to suggest that he meant a *morning last visibility* of Venus.

Bob Schlenker mostly agrees with Martin's interpretation, but he believes that the configuration of the Woman of the Apocalypse occurred one year later, thus in the same year as this author dates it. However, he does not choose the new moon on 1 September, but the subsequent one, which he dates on 29 September 2 BCE. Also, he believes that the Jewish New Year, the 1st of Tishri, was on the latter date.⁶¹⁷ For this to be possible one has to assume that an intercalary month was inserted in spring. Since it is unknown whether this was done or not, a one-month uncertainty must be accepted. A more serious problem, however, lies in the fact that the new moon intended by Schlenker actually took place one day later, on 30 September. By then the moon was already far away from the feet of Virgo, and the image of the crescent moon Madonna was no longer given. Thus 1 September would have been a better choice.

Let us study Schlenker's argument! The text in the Revelation reads as follows:

γύνη περιβεβλημένη τὸν ἥλιον, καὶ ἡ σελήνη ὑποκάτω τῶν ποδῶν αὐτῆς, καὶ ἐπὶ τῆς κεφαλῆς αὐτῆς στέφανος ἀστέρων δώδεκα

A woman clothed with the sun, with the moon under her feet and on her head a crown of twelve stars.

Schlenker is of the opinion that, since the Sun and the Moon are celestial bodies, the "crown of twelve stars" also has to represent some celestial body. He draws the conclusion that the "crown" must refer to Jupiter because he is the king's planet and because within 12 years he makes a loop of retrograde motion, thus a "crown", in each of the 12 zodiac signs. Now, this author has given preference to the preceding new moon because of the heliacal rising of Venus, which he identifies with the Star of Bethlehem that rose in the east. However, if one wants to insist on Schlenker's interpretation of the "crown", then this is also possible with the new moon on 1 September, because Jupiter was already in the region of Virgo's head.

Colin R. Nicholl also interprets the Woman of the Apocalypse as a Jewish new year configuration, and similar to this author, he believes that the "birth" symbolises the heliacal rising of a star. In his opinion, however, this star is not Venus, but some comet that appeared in direct motion below the vulva of Virgo. Nicholl dates the new year new moon to 15 September 6 BCE and the heliacal rising of the "Great Christ Comet" to 29/30 September.⁶¹⁸

⁶¹⁶ Ancient astrologers judged a planet to be "visible" when it was 15° distant from the Sun. That was already the case on 3 September. According to modern, "exact" algorithms, Venus disappeared—depending on the atmospheric conditions uring the last week of September.

⁶¹⁷ Schlenker, "When Jesus was Born - The Celestial Signs".

⁶¹⁸ Nicholl, *The Great Christ Comet*.

Bruce A. Killian takes another route entirely.⁶¹⁹ While he also interprets the Woman of the Apocalypse as the Virgin Mary giving birth to Jesus, he does not believe that this picture includes the date of Jesus' birth. Instead, he interprets the text to refer to future events on 17 November 2036. Whether this date makes sense or not need not be discussed here. However, Killian's astronomical interpretation of the text is interesting. He positions Virgo on the eastern horizon before sunrise, where the light of the coming day "clothes" the constellation. The Moon under Virgo's feet also forms a crescent, but a *waning* one, the *last* visible crescent moon before new moon, not the *first* crescent, as Martin and this author see it. According to Killian, the child the Virgin brings forth has to be Venus, because according to Revelation 22:16, Jesus is the morning star, which is in agreement with the present work's conclusions. He positions Venus in the lower part of the body of Virgo, exactly where it would come forth at the birth.



Woman of the Apocalypse according to Bruce Killian on 17 November, 2036: The Sun is below the horizon. The light of the coming day "clothes" Virgo. Under her feet is the waning crescent moon, visible for the last time. The morning star as the representative of Jesus comes forth from the "womb" of Virgo. (Skymap Pro 11)

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⁶¹⁹ Killian, *The Stopwatch and Key to the Apocalypse*, www.scripturescholar. com/ApocalypseKey.htm (3rd September 2013).

Killian's solution has the apparent advantage that this symbolic picture can be observed just like this in the sky. This is not the case with the other solutions described above. Since the Sun is in Virgo, his light makes the constellation invisible. However, from the point of view of an ancient astrologer, the question of whether a configuration is visible or not was irrelevant. Horoscopes were charted for daytime births too, and they also contained planets that were positioned below the horizon.

Nevertheless, Killian's interpretation seems promising, and the question arises whether a comparable configuration did not perhaps also occur in the vears in which Jesus could have been born. If the configuration had to include a *heliacally rising* Venus, then the answer is "no". When Venus is "born" towards the *feet* of Virgo, this cannot be a *morning* rising, but only an evening appearance. When Venus rises heliacally in Virgo, then she emerges towards the head of Virgo and towards Leo. Therefore, Killian's interpretation is incompatible with a heliacal rising of Venus. However, it would be compatible with a morning first appearance of Jupiter, provided one wanted to see Jupiter as the star of the Messiah. Indeed, Jupiter, as a superior planet, could be "born" towards the feet of Virgo, but within the qualifying period there is no date on which the Woman of the Apocalypse could be seen with Jupiter rising heliacally. In the year 2 BCE Jupiter made his heliacal rising about three days after Venus in the same region near the Virgin's head, not in the area of her womb.⁶²⁰ The next heliacal rising of Jupiter occurred near 1 October 1 BCE. The position of Jupiter would fit, but this was one day before full moon, and the Moon was not located at the feet of Virgo. Since the Sun was already in the area of her feet, the next new moon would not work either. Thus the configuration of the Woman of the Apocalypse, if interpreted using Killian's approach, did not occur during this period.

According to the American New Testament scholar Bruce J. Malina, the identification of the Woman of the Apocalypse with the zodiac sign of Virgo can be traced back to the French scholar Charles François Dupuis (1742-1809).⁶²¹ In Dupuis' opinion the child does not represent a planet, but some inherent part of the constellation of Virgo. He bases this assumption on a passage in the work of the Arabic astrologer Abū Ma'šar, which has already been cited in the Arabic original and discussed by this author (pp. 208ff.). Dupuis renders it as follows:

⁶²⁰ This can be seen from the sky map on p. 290. The nativity date found by this author, namely 1 September 2 BCE, was actually not only near the heliacal rising of Venus, but also near the heliacal rising of Jupiter.

⁶²¹ Malina, *Die Offenbarung des Johannes*, pp. 169f. He refers to: Dupuis, *Origine de tous les cultes*, vol. 6, 1st part, pp. 183ff. and *Abrégé de l'origine de tous les cultes*, pp. 287ff.

On voit ... dans le premier décan, ou dans les dix premiers degrés du signe de la vierge ... un vierge chaste, pure, immaculée, d'une belle taille, d'un visage agréable, ayant des cheveux longs, un air modeste. Elle tient entre ses mains deux épis ; elle est assise sur un trône ; elle nourrit et allaite un jeune enfant que quelquesuns nomment Jésus et les Grecs Christ.

One sees ... in the first decan or the first ten degrees of the sign of Virgo ... a virgin, chaste, pure, immaculate, of beautiful stature, lovely face, with long hair and modest air. In her hands, she holds two [cereal] ears, she sits on a throne, she nourishes and breastfeeds a young child, whom some call Jesus, and the Greeks [call] Christ..⁶²²

Dupuis further writes:

On trouve, à la Bibliothèque nationale, un manuscrit arabe, qui contient les douze signes dessinés et enluminés, et en y voit aussi un jeune enfant à coté de la vierge céleste, qui est représentée à-peu-près comme nos vierges et comme l'Isis égyptienne, avec son fils.

In the National Library, there is an Arabic manuscript which contains the twelve signs, drawn and coloured, and there is also to be seen a young child aside the celestial virgin, who is represented a bit like our Virgins and like the Egyptian Isis with her son.⁶²³

Dupuis assumes that Jesus was born on 25 December during the winter solstice, and he explains that Egyptians, Romans, and Mithraists believed this date to be the "birth date of the sun". According to Dupuis, it was around midnight on this day that the constellation of Virgo rose with a child in her arm on the eastern horizon. Further, he states that the Sun entered Virgo on the suitably symbolical date of 15 August, the feast day of Mary's Ascension that celebrated her reunion with her son Jesus. Finally, he asserts that Virgo rose heliacally on 8 September, the symbolically appropriate date on which the Church celebrates the birthday of Mary. Dupuis concludes that if all this is not merely coincidence, the identification of the Virgin Mary with the constellation of Virgo has to be much older.⁶²⁴ Support for this supposition is given

⁶²² Dupuis, *Abrégé de l'origine de tous les cultes*, pp. 289f.; cf. *Origine de tous les cultes*, vol. 5, p. 136. It is obvious from the context that Dupuis' translation is based on the Latin translation by Hermann von Kärnten (= Hermann of Karinthia or Hermannus Dalmata, 12th cent.), which appeared in 1489 in Augsburg.

⁶²³ Dupuis, *Abrégé*, p. 290; cf. *Origine* vol. V, p. 135, where he refers to manuscript No. 1165.

⁶²⁴ Dupuis, *Abrégé*, pp. 287f. Cf. the elaborate version of this work where he treats the Revelation and the Woman of the Apocalypse in detail: *Origine de tous les cultes, ou religion universelle*, vol. 6, 1st part, pp. 183ff. There he also writes:

[&]quot;... elle présidoit par son lever à minuit à l'ouverture de l'année solstitiale ; et, trois mois après, à l'Equinoxe du printemps, par son lever à 6 heures du soir, ou au commencement de la nuit. Ces liaisons avec les deux principales époques du temps, dûrent lui faire jouer un grand rôle. Joignez à cela, que son lever Héliaque en automne annonçoit aussi le commencement de cette saison et la retraite du Soleil." (p. 187)

by the fact that the date for the death and resurrection of the "Lamb of God" at the Feast of Passover can be correlated meaningfully to another constellation. This feast was symbolically linked to the equinox and to *Aries*, the "ram" (="lamb").

The passage from Abū Ma'šar—which says that the constellation of Virgo breastfeeds a boy and represents Mary and baby Jesus-became known in Europe in the 12th century through a Latin translation. Long before Dupuis, western scholars took up this motive and drew their conclusions from it, but they did not link it with the Woman of the Apocalypse. In the 13th century Albert the Great cited the passage in his Speculum Astronomiae and asserted that it was known that Jesus was born with the first decan of Virgo rising.⁶²⁵ As previously mentioned, from the same century stems the Latin poem De vetula ("On the Old Woman"), which pretends to have been written by the Roman poet Ovid. According to this text, the birth of a great prophet was to be expected six years after a great conjunction of Jupiter and Saturn. Furthermore, it asserts that this conjunction would occur at the moment the first decan of Virgo with the child would be rising (i.e. standing at the ascendant).626 The English astrologer Roger Bacon, who also lived in the 13th century, makes reference to De Vetula in his Opus maius and contributes more astronomical details.⁶²⁷ Pierre d'Ailly (14th/15th cent.) aligns himself with De Vetula and maintains that the first decan of Virgo was not rising at the moment of Jesus' birth, but six years earlier at the moment of the exact conjunction of Jupiter and Saturn. For the nativity of Jesus, he assumes the ascendant at the beginning of Libra, as a result of which almost the complete sign of Virgo would have been visible above the eastern horizon.⁶²⁸ D'Ailly does not mention the origin of this theory, nor the reasons behind it. However, an ascendant at the beginning of Libra results if the birth is assumed

[&]quot;... By virtue of her rising at midnight, she presides over the beginning of the solstitial year, and three months later, [she also presides] over the vernal equinox by virtue of her rising at 6 o'clock in the evening or at the beginning of the night. These connections [of hers] with the two cardinal points in time had to cause her to play an important role. In addition, her heliacal rising in autumn also announced this season and the withdrawal of the Sun."

⁶²⁵ Albertus Magnus, *Speculum astronomiae*, chap. 12. Of course, he believes, in agreement with tradition, that Jesus was born on 25 December. He assumes the vernal point in the birth year of Jesus at 8°36'02 of Aries. A sidereal ascendant in the first decan of Virgo therefore corresponds to a tropical ascendant between 21°23'58" Leo and 1°23'58" Virgo.

⁶²⁶ Pseudo-Ovid, *De Vetula*, III,590ff.

⁶²⁷ Bacon, *Opus majus*, vol. 1, pp. 263-265.

 $^{^{628}}$ d'Ailly, *Elucidarium*, chap. 2 and chap. 34. In d'Ailly's opinion, Albertus and other authors assumed the ascendant at 8° Virgo. This view probably resulted from a misunderstanding of the value of the *ayanāmśa* that Albertus gave for the time of Jesus.

exactly at midnight, thus in the deepest depth of the longest night of the year. 629

However, none of these authors mention the Woman of the Apocalypse in context. It is not certain if they were aware of this connection.

However, as has been stated already, all these authors do not mention the Woman of the Apocalypse in this context. In fact, it seems that Dupuis was the first one to link the Woman of the Apocalypse with the passage in Abū Ma'šar's work. However, he was not completely right. As has already been shown (p. 208ff.) and is also obvious from Dupuis' quotation itself, the image of the young woman with child is not identical with the constellation of Virgo, but rather rises synchronously with the first decan of Virgo. In other words, the constellation of the "Madonna" was a different constellation. This is also obvious from the Zodiac of Dendera, where the Madonna appears as a separate constellation that was probably located south of Virgo and Leo. On the other hand, it seems that the other Arabic manuscript mentioned by Dupuis actually displays the constellation of Virgo itself as a woman with child (French National Library #1165). This author has not seen the manuscript himself, but if Dupuis' assertion is correct, then it seems that there was also an older tradition that interpreted Virgo as a woman with child. However, since Abū Ma'šar refers to a Christian tradition, too, there also must have been a Christian tradition that knew the Egyptian constellation of the Madonna south of Virgo and Leo.

Connections to the Cult of Isis

Attempts have been made to find models in ancient mythologies for the Woman of the Apocalypse, the birth of her child, and the dragon who threatens the child.⁶³⁰ Malina thinks that the myth of Isis, Horus and Seth comprises a parallel.

Seth had murdered Osiris, the king of Upper and Lower Egypt, cut his body into fourteen pieces, and seized rule over the land. Osiris' wife, Isis, starts to search for the pieces and finds them all except for the phallus. She reassembles the body, gives it a penis made of gold, revives him, and they beget a son. This son is the god Horus, who avenges Osiris by defeating Seth and reclaiming the throne of the Two Lands after a terrible battle with his father's murderer.

⁶²⁹ The ascendant was assumed at 2°51'26" Libra. From this, D'Ailly calculates a birth time 11:40 p.m. However, 12:07:46 a.m. LMT (12:03:48 LAT) would be more correct according to modern calculation and using the coordinates of Bethlehem. Thus, Jesus would have been born on 25 December 1 BCE at midnight.

⁶³⁰ See Malina, On the Genre and Message of Revelation; Malina/Pilch, Social-Science Commentary on the Book of Revelation.

Where is the parallel to Revelation 12? Just as Isis and her child are threatened by Seth, the Woman of the Apocalypse and her son are threatened by the dragon. Because of the enormous differences between the Egyptian and the Christian myth, this parallel is anything but obvious. Nevertheless, the analogy gains support by parallels between the cult of Isis and that of Mary. Isis, too, was popularly depicted with the Horus child in her arm or on her knee, in the same way as Christian Madonnas, and it is obvious that Isis was a prototype for Madonnas.

However, the decisive models for the motive of the Woman of the Apocalypse probably do not originate in mythology but in ancient Oriental lunisolar calendars, mystery celebrations, and astrology. The Hebrew calendar—just like the calendar of Uruk, Ishtar's town in southern Mesopotamia, and other local calendars of the ancient Orient—began the year on a new moon before the autumn equinox, at the same time as the Sun was in the constellation of Virgo and the Moon near her feet. Here lies the true origin of this mythical picture.

In the context of calendars and mysteries, there is an impressive source in Lucius Apuleius' Metamorphoses, Book XI. This is not a myth but a kind of "autobiographic" novel. In it, Apuleius relates that a magic spell accidentally transformed him into a donkey, and that after a series of adventures, the goddess Isis finally broke the spell. She saw to it that he regained his human form and that he was inducted into her mysteries. A description of the celebrations and the induction are so convincing and touching that it must be assumed that Apuleius was a member of the Isis cult. The parallels with John's vision of the Woman of the Apocalypse are astonishing⁶³¹:

Circa primam ferme noctis vigiliam, experrectus pavore subito, video praemicantis lunae candore nimio completum orbem commodum marinis emergentem fluctibus, nanctusque opacae noctis silentiosa secreta, certus etiam summatem deam praecipua maiestate pollere... deam praepotentem lacrimoso vultu sic adprecabar...

About in the first night watch, awaking from a sudden fright, I see the completely full disc of the shining Moon in blinding brightness rising from the floods of the ocean. And feeling the silent secrets of the dark night, and convinced that the high goddess was acting by her preeminent majesty, ... I prayed as follows to the almighty goddess with a face full of tears ...

Lucius (Apuleius) wakes up as night falls and sees the full moon rising from the sea. He imagines that the goddess, Isis, the mistress of animals, is especially powerful at this time. He ritually cleanses himself and prays to the goddess, hoping that she will help him. After that, he lies down again and goes to sleep. Shortly thereafter, the goddess appears to him in a dream:

⁶³¹ (Griffith), *Apuleius, The Isis-Book (Metamorphoses, Book XI)*, p. 70ff. (Latin text and English translation with commentary by J. Gwyn Griffiths).

(3) ... Necdum satis coniveram, et ecce pelago medio venerandos diis etiam vultus attollens emergit divina facies: ac dehinc paulatim toto corpore perlucidum simulacrum excusso pelago ante me constitisse visum est. ...

And I had hardly fallen asleep, and lo, a divine face rose from the middle of the ocean which would even have the gods lift their faces. Then, the shining image gradually appeared with its whole body from the churning sea and stood in front of me. ...

Iam primum crines uberrimi prolixique et sensim intorti per divina colla passive dispersi molliter defluebant.

To begin with, her abundant, flowing, and slightly braided hair was loosely spread and flowed softly over her divine neck.

Corona multiformis variis floribus sublimem destrinxerat verticem, cuius media quidem super frontem plana rotunditas in modum speculi vel immo argumentum lunae candidum lumen emicabat, dextra laevaque sulcis insurgentium viperarum cohibita, spicis etiam Cerialibus desuper porrectis.

A crown of many forms and various flowers adorned her high vertex, in the middle of which, above the forehead, there was a flat disc which let bright white light shine forth like a mirror, or rather like a representation of the Moon. On both the left and the right side, it was held together by engraved erected snakes as well as cereal ears that were attached above them.

[Vestis (?)] multicolor, bysso tenui pertexta, nunc albo candore lucida, nunc croceo flore lutea, nunc roseo rubore flammida, et, quae longe longeque etiam meum confutabat obtutum, palla nigerrima splendescens atro nitore, quae circumcirca remeans et sub dexterum latus ad humerum laevum recurrens umbonis vicem deiecta parte laciniae multiplici contabulatione dependula ad ultimas oras nodulis fimbriarum decoriter confluctuabat.

Her dress was multi-coloured, woven from finest linen, partly shining in white splendour, partly coloured yellow like a bloom of crocus, partly burning in rosy red. However, what confused my sight the longer the more was an extremely black outer garment that shone with dark splendour, surrounded her all around, ran below her right arm over her left shoulder like a battle shield, and the part of the cloth that was thrown over flowed down decoratively with multiple folds and with tassels until the lowest hems.

(4) Per intextam extremitatem et in ipsa eius planitie stellae dispersae coruscabant earumque media semenstris luna flammeos spirabat ignes: quaqua tamen insignis illius pallae perfluebat ambitus, individuo nexu corona totis floribus totisque constructa pomis adhaerebat.

Scattered stars twinkled, woven in along the seam as well as the surface [of the gown], and in the middle of them, the full moon spread flaming fires. Wherever the seam of this extraordinary gown flowingly extended, a wreath woven of all flowers and all fruits was attached to it in uninterrupted concatenation.

Iam gestamina longe diversa: nam dextra quidem ferebat aereum crepitaculum, cuius per angustam laminam in modum baltei recurvatam traiectae mediae paucae virgulae, crispante brachio trigeminos iactus, reddebant argutum sonorem. Moreover, she held quite various things, namely in the right hand a golden rattle with a narrow metal sheet that was bent like a belt and was traversed by some sticks that made a high sound when the arm was shaken three times.

Laevae vero cymbium dependebat aureum, cuius ansulae, qua parte conspicua est, insurgebat aspis caput extollens arduum, cervicibus late tumescentibus. Pedes ambroseos tegebant soleae palmae victricis foliis intextae.

From her left hand, a golden drinking vessel hung down, along whose handle, on its visible side, a snake erected, lifting its head high and swelling its neck broadly. Her ambrosial feet were covered by sandals which were braided from the leaves of the victorious palm tree.⁶³²





Isis, Capitoline Museums, Rome, 2nd century CE.

To highlight a few important points: She emerges from the sea, wearing a wreath of flowers (= stars?), and above her forehead the moon glows. Her robe, shimmering in white, yellow, and rose, was enveloped by a black coat on which stars and flowers glittered, and in its middle was the full moon⁶³³.

Just as in the case of the Woman of the Apocalypse, this describes how a "star-woman" appears in heaven to a mortal man. The wreath of flowers above her forehead is reminiscent of the crown of stars of the Woman of the Apocalypse. The astronomical configuration is, however, complementary to the one described in Revelation. The woman is not clothed in the Sun, and the Moon is not a crescent under her feet. Instead her cloak is night black, and she carries the full moon on her forehead. It is obvious that *this does not*

⁶³² Translation D.K., Latin Text from (Gaselee), *Apuleius, The Golden Ass*, pp. 542ff.; cf. (Griffith), *Apuleius, The Isis-Book (Metamorphoses, Book XI)*, pp. 70ff.

⁶³³ semenstris luna, "half-month moon". Griffiths translates it as "half-moon", p. 73. However, in the lunisolar calendar, the middle of the month is at a full moon. Griffiths wants to have a "half-moon", because "all the representations (of Isis, D.K.) show a half-moon" (p. 132). However, it is evident at the beginning of the XIth book that Apuleius has his vision during a full moon. Cf. the picture of the Roman Isis statue with the full moon above her forehead.

describe the autumn new moon, but the full moon before the beginning of spring. It is remarkable that both these astronomical configurations are complementary to one other and that in near-eastern cultures occurred on important dates in their calendars and during religious celebrations. In particular, as has been demonstrated, the birth and death of Jesus also occurred, or were considered to have occurred, on these important dates. In fact, in the text under discussion Isis speaks explicitly about the great cultic importance of that full moon day. The date involves a New Year celebration during which people are consecrating a ship to the goddess.

The goddess continues with instructions about how the donkey, Lucius, has to conduct himself during the festivities in honour of the goddess in order to regain his human form.

The fact that the robe of the goddess sometimes appears in white, sometimes in yellow or rose colour might indicate her appearance in the various seasons. It is white when the sun is in Virgo, yellow and rose coloured when Virgo rises (or sets) heliacally. This occurs in autumn.

What happens after Lucius' spell is broken is also interesting: A burning desire to be initiated into the mysteries of Isis overcomes him. His wish is eventually granted. He is sworn to silence about the details, but this much he is allowed to divulge:

Accessi confinium mortis et calcato Proserpinae limine per omnia vectus elementa remeavi; nocte media vidi solem candido coruscantem lumine; deos inferos et deos superos accessi coram et adoravi de proximo. ...

I approached the boundary of death, and treading on Proserpine's threshold, I was carried through the elements, after which I returned. At dead of night, I saw the sun flashing with bright effulgence. I approached close to the gods above and the gods below and worshipped them face to face. ...

(24) Mane factum est, et perfectis sollemnibus processi duodecim sacratus stolis, habitu quidem religioso satis....

By morning, all was over, and the rites being completed, I went forth after receiving the initiate's twelve robes, a mode that was indeed most exalted. ...

Namque in ipso aedis sacrae meditullio ante deae simulacrum constitutum tribunal ligneum iussus superstiti, byssina quidem sed floride depicta veste conspicuus, et humeris dependebat pone tergum talorum tenus pretiosa chlamida: quaqua tamen viseres, colore vario circumnotatis insignibar animalibus; hinc dracones Indici, inde grypes Hyperborei, quos in speciem pinnatae alitis generat mundus alter: hanc Olympiacam stolam sacrati nuncupant.

For in the middle of this same sanctuary, I was told to ascend a wooden dais set before the statue of the goddess, in order to be seen in a tunic that was made of linen, but painted with flowers. Further, from my shoulders, behind my back down to my heels, there hung a precious cloak. Wherever you looked, I was adorned by beasts embroidered round about in varied colours. Here were Indian dragons, there were griffons from the far north, animals created in the form of a winged bird by a world other than ours. The initiates call this the Olympian robe. At manu dextera gerebam flammis adultam facem, et caput decore corona cinxerat, palmae candidae foliis in modum radiorum prosistentibus: sic ad instar Solis exornato me et in vicem simulacri constituto, repente velis reductis, in aspectum populus errabat.

However, in my right hand, I carried a torch with rearing flames and my head was garlanded gracefully by a crown made of leaves of the white palm tree that stood out like rays. When I had thus been adorned like the sun and set up in the manner of a divine statue, suddenly the curtains were drawn and the people crowded to behold me.⁶³⁴

The fact that Lucius has to change his clothes twelve times during the night of his initiation is interpreted as his traversing the twelve hours of night with the sun god, as described in the Egyptian books of the Underworld.⁶³⁵ After that, in the early morning, he presents himself to the people, probably at sunrise, with his head appearing as a sun and carrying a torch in his hand. It seems natural to suppose that the torch represents the heliacal rising of the morning star, as a symbol of spiritual rebirth. However, during which month does this take place? Which zodiac sign is clothed in the sun? Could it be Virgo?

Unfortunately, the text does not provide any obvious clues whether this initiation takes place during a specific season, possibly even during the time of Virgo. It only states that the appointed time was chosen by the goddess herself, and that it was communicated to Lucius as well as to the priest in dreams. However, it apparently involves a celebration over several days in which many people take part, and it is known that in the Isis cult, spring and autumn celebrations were the most important festivals. Lucius regained his human form during a spring festival. In the Roman calendar, this so-called Isidis navigium always falls on 5 March. As against that, the autumn festival was celebrated from 26 October to 3 November.⁶³⁶ At that stage, the time of Virgo was long past. However, the events described by Lucius take place in Greece, in Kechries near Corinth, and there a lunar calendar was in use. It is very likely that there the Isis festivals were not celebrated according to the Roman calendar, but, as indicated by Apuleius himself, in agreement with the local lunar calendar and during the correct lunar phases. Thus, it is quite likely that Lucius' second initiation took place in autumn in the time of Virgo.

⁶³⁴ Latin text according to Gaselee, p. 580ff.; cf. Griffith pp. 98ff.

⁶³⁵ Griffith p. 308f.

⁶³⁶ Kloft, *Mysterienkulte der Antike*, p. 51.



Egyptian representation of Isis with Horus, her son. On her head she wears a solar disc between cow's horns. However, in Apuleius' work she wears a lunar disc above the forehead.

Egyptian representations of Isis show that the crescent moon was an important feature. On her head, she wears a red Sun between bull's horns or inside a crescent moon. Sometimes she also wears a sash on which a crescent moon is depicted.⁶³⁷ These representations could point to a new moon festival in the time of Virgo in autumn. Isis is never depicted standing on a crescent moon like the Woman of the Apocalypse, even though this is claimed by Boll and others.⁶³⁸ Still, the symbolic reference to the Sun, the crescent moon and the new moon is obvious. Does the iconography of Isis relate to a new moon in Virgo and to an oriental New Year's date?

That possibility is contradicted by the fact that the Isis iconography is very ancient and the zodiac is known to have come to Egypt only in Hellenistic times. From this one could conclude that the identification of Virgo with Isis originated in the Hellenistic era. However, it is not quite as simple as that. As far back as the *Pyramid Texts*, the very oldest sources on Egyptian astronomy, some constellations of the zodiac are mentioned. In fact, these

⁶³⁷ Griffith, p. 130.

⁶³⁸ Roman representations of Isis-Fortuna in Italy often show the goddess standing on a globe. These may have influenced the motif of the Woman of the Apocalypse. However, this globe probably did not represent the Moon. In other mystery religions there were also deities depicted as standing on such globes, e.g., the lion-headed god Aion in Mithraism. Ulansey interprets this globe as a celestial sphere. Often there are two lines on that sphere that criss-cross each other in X shape. Ulansey interprets them as the celestial equator and the ecliptic (Ulansey, *The Origins of the Mithraic Mysteries*). The same observation applies to depictions of Isis-Fortuna on a globe.

have hardly been researched, but some of them seem to invite one to identify them with the familiar ones, such as Taurus, Libra, Scorpio, and Virgo.⁶³⁹ The question arises whether there were earlier astral-mythological connections between Egypt and Mesopotamia.

However, whatever the case may be, in Roman times the zodiac sign of Virgo was identified with Isis, from which it can be inferred that the Isis iconography speaks of a new moon in Virgo. Thus, were the initiation rites conducted on this date? A piece of circumstantial evidence is the statement above that the robe of the virgin Isis can appear to be white, yellow, or rose-coloured. This indicates, as has been stated, that the heliacal rising (or setting) of this constellation was particularly important.

Is it to be concluded that John's Woman of the Apocalypse was inspired by Isis mysteries? This is possible; however, one also has to bear in mind that the Woman of the Apocalypse stands for a calendar date that, strictly speaking, cannot be assigned to a particular cult, but was of great significance in the whole ancient Orient where lunisolar calendars were used. It is conceivable that similar visions of the heavenly Virgin played an important part not only in the cult of Isis and of Christianity, but also in other mystery religions of that epoch.

Isis in India?

During the first few centuries CE, Greco-Egyptian authors fertilised Hindu astronomy and astrology. Around the same time the motif of the celestial virgin who reveals herself to a mortal and carries the Sun and the Moon in her body seems to also have been transmitted to Hindu sky gazers and priests. At least, it appears in Kṛṣṇa's nativity story in *Harivaṃśa* 48 (or 2.4), a text that is reckoned among the Purāṇas, but at the same time is also considered to be an "appendix" of the Mahābhārata Epic. It is worthwhile to study this text, too. Although it is unknown to what extent it is related to the visions of John or Lucius, nevertheless it provides further confirmation for this author's interpretation of these texts.

Kamsa, the usurper of the throne of Mathurā, is warned by a prophecy that the eighth child of the pious couple Vasudeva and Devakī would kill him. For this reason, he imprisons the couple and kills every child Devakī gives birth to. However, he fails to kill the eighth child, who is Kṛṣṇa, an avatar

⁶³⁹ Some thoughts on this can be found in: Koch, *Der Stierkampf des Gilgamesch*, 2008², p. 475ff.

Incidentally, the idea that the Greeks were the first to create Libra by separating it from the pincers of Scorpio is mistaken. Libra is already found in the cuneiform text MUL.APIN. The astronomical observations on which this was based were made between 2300 and 1400 BCE.

or incarnation of almighty God. By means of a mysterious magical trick, the divine child is exchanged with another one just after their simultaneous birth. That other child is an incarnation of Yogamāyā, the great goddess, who is born at the same time as Kṛṣṇa to a different mother. Thus, instead of Kṛṣṇa, newborn Yogamāyā is brought before evil Kaṃsa, who smashes her on the stone floor in his palace. Immediately after this cruel crime, however, he sees her rising in the sky, apparently as a constellation. She talks to him and reveals him that all his attempts to kill the divine child have failed and that he will not evade his fate. The Sanskrit original describes Kaṃsa's vision as follows (HV 48(2.4).27-33):

सा गर्भशयने क्रिप्टा गर्भाम्बुक्तिन्नमूर्धजा । कंसस्य पुरतो न्यस्ता पृथिव्यां पृथिवीसमा ॥ 27

(27) In the child's bed, exhausted, [only just] born with her head wet of amniotic fluid,

she was laid down before Kamsa, onto the earth, the earth-like [goddess].

पादे तां गृह्य पुरुषः समाविध्यावधूय च ।

उद्यच्छन्नेव सहसा शिलायां समपोथयत् ।

सावधूता शिलापृष्तेऽनिष्पिष्टा दिवमुत्पतत् ॥ 28

(28) The man grasped her at her foot, swung her downwards and upwards and smashed her violently against the stone floor. She, however, *smashed against the stone floor, rose to the sky unsmashed.*

हित्वा गर्भतनुं चापि सहसा मुक्तमूर्धजा ।

जगामाकाशमाविष्य **दिव्यस्तगनु**लेपना ।

[हारशोभितसर्वाङ्गी मुकुटोज्ज्वलभूषिता । var.] **कन्यैव** साभवन्नित्यं दिव्या देवैरभिष्टता ॥ 29

Immediately, she abandoned the form of a new-born. And with unloosened hair,

with a celestial wreath and [anointed with] divine oils, she went to the sky. (var. her members sparkling with pearl chains, adorned with a shining horn-shaped crown.)

She became a virgin permanently, the divine one, cheered by the gods.

नीलपीताम्बरधरा गजकुम्मोपमस्तनी ।

रथविस्तीर्णजघना **चन्द्रवक्रा** चतुर्भुजा ॥ 30

She wore blue and yellow clothes, her breasts resembled the forehead of an elephant⁶⁴⁰;

 $^{^{640}}$ This alludes to the two bulges on the forehead of the Asian elephant.

her vulva was as broad as a chariot, *her face (or mouth) was the Moon*, she had four arms;

विद्युद्विस्पष्टवर्णाभा **बालार्कसदृशेक्षणा** । पयोधरस्वनवती **संध्येव** सपयोधरा ॥ 31

her complexion shone bright like lightning, her eyes resembled the newborn Sun⁶⁴¹;

she made a sound like rain clouds, she carried rain clouds *like the dawn* (or: *dusk*).

सा वै निशि तमोग्रस्ते बभौ भूतगणाकुले । नृत्यती हसती चैव विपरीतेन भास्वती ॥ 32

At night, she shone in the host of the spirits (*bhūta-*), which was swallowed by darkness;

she danced and laughed and shone against [them].

विहायसगता रौद्रा पपौ पानमनुत्तमम् ।

जहास च महाहासं कंसं च रूषिताब्रवीत् ॥ 33

She went to the sky, the wild one, she drank the unsurpassable drink, she laughed a great laughter and said to Kamsa truculently: $...^{642}$

The baby girl is smashed against the floor and then rises to the sky as a *celestial virgin*. The Sanskrit word for "virgin" (*kanyā*) is the same as the one used in astrology for the zodiac sign of Virgo. That she is smashed against the floor and rises to the sky could be an allusion to her heliacal setting and rising, especially since there is also talk of the *dusk* or *dawn* (both *saṃdhiḥ*), when heliacal settings and risings are observed. The goddess wears a wreath (*sraj*), probably on her head, and her body sparkled, which is reminiscent of the Isis vision of Apuleius. According to a text variant, she wears a shining crown. Her eyes resemble the Sun and her mouth the Moon. This could point to a new moon in the month of Virgo.

The similarity of this description with the visions of Apuleius and John can hardly be an accident. It proves how widespread this motif was in ancient mystery religions.

⁶⁴¹ "new-born Sun" (*bālārkaḥ*), an epithet of Kṛṣṇa.

⁶⁴² HV 48(2.4).27-33, Critical Edition of the Harivamsha, BORI.



Inmaculada concepción con Dios Padre by *Joan de Joanes*, 16th cent. (Iglesia parroquial de Santo Tomás Ápostol y San Felipe Neri, Valencia)

The Madonna as a Zodiac Sign in the Visual Arts

On p. 291, a painting was shown that illustrates the celestial configuration on the birthday of Jesus that has been found in this investigation. The *Inmaculada Niña* by *Francisco de Zurbarán*, painted around 1630, shows the Virgin lit by the sun, with the crescent of a new moon under her feet, and on her right side over her shoulder the heliacally risen morning star. The Madrid School of the 17th and 18th century produced numerous examples of this motive, some of which are given below.



Inmaculada Concepción by Juan Antonio de Frías y Escalante, about 1660. (Museo de Bellas Artes de Córdoba). The morning star is situated in the middle of the right side in the painting, very close to the sunlight and, realistically, barely visible.

Many of these pictures captivate by their astronomical precision. The morning star is usually on the right hand side of the Virgin, in exactly the position it would appear in natura, and close to the sunlight from which it is just emerging. The paintings show an astonishing astronomical knowledge or experience in observing the heavens.



Inmaculada Concepción, by Miguel Jacinto Meléndez, 1733. (Museo Lázaro Galdiano, Madrid) The morning star is close to the right edge of the painting.

Does the newly appearing morning star in these paintings represent the newborn Christ child? That is not the case. In some paintings, the star is explicitly inscribed "stella maris" ("star of the sea", vide p. 318), thus it represents Mary. As mentioned, Catholic tradition deviates from Biblical statements that identify the Morning star with Jesus. (Rev. 22:16). However, the remarkable fact remains that the configuration depicted here accurately reflects the birth date for Jesus found in this work from an astronomical point of view.

Incidentally, Mary has adopted not only the morning star as her representative, but possibly also the birth date of Jesus. The feast of the Conception of Mary is celebrated on 8 December and the feast of her birth nine months later, on 8 September. On 8 September, the Sun was in Virgo. If this day happened to be a new moon, the lunar crescent would have been located at the feet of Virgo. Looked at from an astronomical point of view, this celestial configuration goes very well with the paintings. Did Mary adopt the birth date of Jesus? The origins of this feast day are obscure. In the Orthodox Church it is documented since the 6th century. It was adopted in Rome around the year 700 under Pope Sergius I. Its origins are said to be Syrian.⁶⁴³

⁶⁴³ *The Catholic Encyclopedia*, "Feast of the Nativity of the Blessed Virgin Mary", www.heiligenlexikon.de/CatholicEncyclopedia/Maria-Geburt.html.



Inmaculada Concepción by *Juan Carreño de Miranda*, about 1780. The morning star is the white dot above the sea in the bottom right hand corner. The painter apparently alludes to Mary as "Star of the Sea".

All these paintings show the so-called "immaculate conception" (*inmaculada concepción*). The title calls for an explanation. It does not refer to the conception of Jesus but rather the conception of Mary herself as an "immaculately conceived one". Indeed, according to Catholic teaching Mary was conceived in the usual biological manner, but in such a way that she was born without the ancestral sin. It was believed that only in this way could she become the mother of the Son of God.⁶⁴⁴ Nonetheless, these paintings have to be seen as depictions of the pregnant Virgin who is about to give birth to a son, as is demanded by the verses in Revelation 12.

⁶⁴⁴ The doctrine of the "immaculate conception" is not directly documented in the Bible. It gained acceptance as late as the 15th century and became an official Catholic dogma under Pope Pius IX only in 1854.

There is also another version of the "immaculate conception" that is astronomically less precise but very widespread. In these paintings, the morning star can be seen in any of the following forms: above the head of the virgin, sometimes explicitly as a star, sometimes in the shape of a shining dove or as a dove inside a star. When Jesus was baptised by John in the river Jordan, it was the Holy Spirit that came down to him in the form of a dove. However, in the ancient Oriental religions the dove was associated with the goddess of fertility, Astarte-Ishtar, the goddess related to Venus. The Greek word for dove, *per-ister-a* ($\pi\epsilon\rho\iota\sigma\tau\epsilon\rho\dot{\alpha}$), is a Semitic loanword and actually means "bird (*perakh*) of Ishtar".



Illustration from the *Missum Romanum*, the *Tridentine Mass*, of Pope Pius V of 1570. A flying dove is depicted inside the star above the Sun-clothed Virgin's head. The star can only be the morning star, according to this author's thesis.

The depiction of the "Immaculate Conception" with a shining dove or a star with a dove above the head of the Virgin is widely used. It is found in all of Catholic Europe as well as in Latin America.



Inmaculada by *Mariano Salvador Maella*, 18th cent., with a dove above her head. (*Ilustre Colegio de Abogados*, Madrid).

In the painting *Adorazione del bambino* of the Florentine painter *Fra Filippo Lippi*, the star with the dove apparently represents the Star of Bethlehem. Mary is kneeling in front of the Christ Child lying on the ground and worshipping it. Above the child, there is the star with the dove.



Adorazione del bambino ("Adoration of the Child") by the Florentine painter Fra Filippo Lippi, 1459. (Staatliches Museum, Berlin)





Inmaculada, by *Juan de Valdes Leal*, painted in 1685. The morning star appears twice in this painting, once symbolically as a dove and once as a real star whose beam penetrates the Virgin's heart.


Inmaculada concepción by Juan de Valdés Leal painted in 1670. (Museo Provincial de Bellas Artes, Sevilla). Here the star above the Virgin is combined with the triangle symbolizing God instead of a dove.



Inmaculada concepción by Alonso del Arco, 17th century. (*Convento de Sta. María Magdalena (MM. Agustinas)*, Medina del Campo). Here, the dove star is positioned in the centre of the crown of stars.

The School of Potosi in Bolivia also deserves special mention. In Potosi, the *Virgen del Cerro* is revered. The indigenous goddess Pachamama, who lives in the silver mountain of Potosi, is identified with the Holy Virgin and the Woman of the Apocalypse. Here, the Sun, the Moon and the stars frequently appear twice in a picture. In the following example, there is a sun to the left of the mountain and a crescent moon with a star to its right. However, this common depiction of the Moon and star does not precisely correspond to the configuration of the Woman of the Apocalypse. If the star were the morning star, then the crescent moon would be the *old moon before* the new moon; on the other hand, if the crescent represented the first sliver of the new moon, the star would be the evening star. The painting probably depicts a waxing moon, but as Potosi is located in the tropics, the viewing direction of the crescent moon does not prove of it.



Virgen del Cerro of Potosí, Bolivia, anonymous, 18th century (*Casa de la Moneda*, Potosí, Bolivia): The Sun, the crescent moon, and the morning star are represented twice, once in a vertical line and once in a horizontal line.

The following anonymous painting from the 18th century is also from Potosi. It is also a picture of the Virgin of the Mountain. However, this time she carries the morning star in her *heart* and the child on her arm. Above the star are the words "*setella matutina*", thus explicitly identifying morning star.



The *Virgen del rosario* (*Virgin of the Rosary*), anonymous, 18th century (*Casa de la Moneda*, Potosí, Bolivia. Unfortunately the top portion of the picture has been destroyed): An image of the Sun is above the crescent Moon at her feet, and the morning star (*setella matutina*) shines from her heart.. The morning star in her heart reminds one of 2 Peter 1:19.

One can observe *lilies* in many of the above pictures. Traditionally, lilies in their matchless white symbolically represent the purity of the Virgin. That is why this kind of lily, *lilium candidum*, is popularly known as the "Madonna lily". However, in the ancient Near East white lilies and rosettes were symbols of the goddess of love and war, Astarte-Ishtar, who was the goddess of the planet Venus at the same time. Ishtar is frequently depicted together with a six- or eight-pointed star. Just as frequently, instead of the star, there is a *rosette*. This was probably not meant to be a rose, as roses have only five petals, but rather a lily with its six petals. Thus, even the lily, when it appears

in Madonna iconographies, originally stood for the morning star. The similarity in form between stars and flowers plausibly links the Queen of Heaven with the fruitfulness of the earth. Indeed, flowers, especially white ones, are reminiscent of stars.

Some Madonnas carry the so-called lily-sceptre. Its tip is often next to the left shoulder of the Virgin that is in the position in which the morning star appears next to the constellation of Virgo. It is evident that this lily-sceptre is a symbol of royal reign. The lily as a symbol for the king is familiar in French tradition, for example. As early as the time of the Roman emperor Hadrian a coin depicts the goddess Gallia with a lily in her hand.⁶⁴⁵ Since Chlodwig I the lily is to be found in the coat of arms of French kings. The seal of Philip I (11th century) shows the king on his throne holding a lily sceptre. Since Louis VII the coat-of-arms shows a golden lily, the *fleur-de*lys ("flower of Louis") on a blue background. According to a legend, the Merovingian king Chlodwig adopted the lily as a symbol on his coat-ofarms after he was converted to Christianity. During a desperate battle with the Visigoths, either an angel or the Virgin Mary (!) or his own wife appeared to him and handed him a lily as a sign of victory and of royal rule. Thus, does this lily belong to the ancient goddess of Venus, the goddess who made kings? In ancient Egypt, on Crete, and in Assyria the lily was also linked to kingship. It makes a dramatic appearance on bas-reliefs in the northern palace of King Assurbanipal in Nineveh: He saw himself as a son of Ishtar and believed that she had chosen him to be king.

The Balaam prophecy seems to suggest that one should visualise a star to be at the point of the sceptre. The text mentions both "a star and a sceptre", and in Rev. 2:28 the morning star seems to stand for a sceptre.

In renderings of the "Immaculate Conception" the Virgin does not normally carry a child. One may ask why this is so. In the apocalyptic text the first mention is of a *pregnant woman* and one *giving birth*. The child is born further on in the text. Did the artists want to depict Mary *before* she gave birth? Or should it be assumed, in view of the realistic-astronomical paintings from Spain showing the morning star, that the depiction of the child is unnecessary because the morning star itself is the child?

⁶⁴⁵ according to http://www.baronage.co.uk/bphtm-02/moa-15.html.



Madonna carrying a lily-sceptre (*Propstei Halle*). The lily is an ancient symbol of Astarte-Ishtar, the goddess of the planet Venus. Therefore, it stands for the morning star. Its position to the left of the Virgin is again correct astronomically.

The "Immaculate Conception" is merely a younger form of the crescentmoon Madonna. In the older figure, the Madonna with the crescent moon always carries the child, usually on her left arm on the side of her heart, the place where the child naturally belongs. As has been stated, the morning star always appears on the right hand side of Virgo as seen by the viewer, thus on her own left hand side. It is quite possible that observant watchers of the skies in ancient times were aware of this notable parallel, even though there are no known written records of this. The artists of the Renaissance and early modern times seem to have been aware of this circumstance. It has been found that some of the artists of the Madrid School must have been experienced watchers of the heavens. The first crescent-moon Madonnas were painted during the Renaissance. Apparently, this concept originated with people who were interested in, and watched, the heavens. In Renaissance painting the morning star appear not only in depictions of the Madonna with the crescent moon, but also in more traditional pictures of the Virgin with the Child. Florentine artists of the 14th and 15th centuries liked to depict the Madonna with the child in one arm and the morning star on her opposite shoulder. On p. 332 there is an example of such a painting. This can also be seen as an astronomically correct illustration of a heliacal rising of Venus in Virgo, especially in cases where the star is situated above the left shoulder of the Virgin. It is apparent that here, too, the Virgin was understood to represent the constellation of Virgo.



Virgen de la Humildad by the Florentine painter *Fra Angelico*, 1433-35, with the morning star on the right shoulder. (Madrid, *Museo Thyssen-Bornemisza*, in storage at the *Museu Nacional d'Art de Catalunya* in Barcelona). The Florentine painters of the 15th century frequently painted Madonnas with a star on their shoulders. There are similar paintings by Lorenzo Monaco and Sandro Botticelli (*Madonna del libro*).



A further artistic interpretation of the same motive: The painting "Der kleine Morgen" ("The Little Morning") by the Romantic painter Philipp Otto Runge (1777-1810). The woman in the middle is the goddess Aurora, depicted as both Venus and the Holy Virgin "clothed by the Sun". The Moon below her feet is represented twice: firstly as a new-born child lying on the ground, in conformity with the symbolism of the Moon in astrology, and secondly as a new moon, or more precisely a solar eclipse, at the bottom of the painting outside the "window". The star at the top of the painting most likely represents Venus.

Crescent and Star

Historically, the cult of Mary is connected with the cult of Venus-Ishtar. For this reason, the picture of the Virgin above a crescent moon may remind the reader of the crescent moon and star that is found on Old Mesopotamian cylinder seals. This image has survived in unbroken tradition up to the present time, where it is still found on the flags of Islamic states. As has been seen, it also appears on Molnar's coins from Antioch, which show the crescent Moon and the star with the ram. The ram represented the zodiac sign of Aries, which was related to Tammuz, the lover of the goddess. The ancient Near East also knew depictions of the goddess Ishtar as a naked young woman standing on a bull. In Mesopotamia the new moon crescent was seen as the horns of the moon god in the figure of a bull. Therefore, it seems that the crescent moon Madonna is historically related to the goddess standing on a bull.

From this, there emerges a further possible interpretation for the Woman of the Apocalypse that apparently has never been considered. Does the picture of the Woman of the Apocalypse represent Venus above the crescent moon? Although a different solution has been found already, nevertheless, this possibility deserves to be mentioned and carefully investigated.

Based on this approach, Revelation 12 can be interpreted astronomically in two ways:

- 1. It may describe the evening of the first crescent. The crescent moon becomes visible for the first time and it is in conjunction with Venus. A Sumerian hymn in honour of King Iddin Dagan of Isin describes precisely this configuration that was formed on New Year's Day in spring, the so-called Akiti-festival.⁶⁴⁶ In Mesopotamia this festival was always celebrated on a new moon close to an equinox, either in spring or autumn, depending on the local tradition. The text describes a quasi sexual union of the goddess Venus and the king (sacred marriage) which legitimised his royal reign.
- 2. Orr it may refer to the morning just before new moon. According to this interpretation, he crescent is visible in the morning sky for the last time before dark moon and is in conjunction with Venus. This day, too, was relevant in Mesopotamia, for Sumerian royal hymns show that the New Year celebrations had already begun on "the day on which the Moon disappeared" (ud nu₂-a).

If John was referring to either of these two astronomical situations, then the symbol of the star and the crescent moon would represent the Mesopota-

⁶⁴⁶ "A hymn to Inana for Iddin-Dagan (Iddin-Dagan A)", in: Black et alii, *Electronic Text Corpus of Sumerian Literature*, http://etcsl.orinst.ox.ac.uk/cgi-bin/etcsl.cgi?text=t.2.5.3.1&charenc=j#

mian New Year celebration. Every year at this celebration the king was "reenthroned" as a lover and son of the goddess (even though Venus was not necessarily in conjunction with the lunar crescent every year during this festival). Indeed, this approach provides an attractive interpretation of the Woman of the Apocalypse. The goddess gives birth to the child that is to be the ruler of the world. The crescent moon Madonna is, just like the crescent moon and Venus, a symbol for divinely legitimised royal rule.

What then would be the astronomical or astrological meaning of Revelation 12? Would it imply that Jesus was born close to a New Year's new moon? Would it suggest that Jesus was born on a date connected to the enthronement of the "ruler of the world" according an old calendar tradition? Such a birth date would show beautiful symbolism.

The New Year was celebrated in Palestine at the beginning of autumn, as it was in South Mesopotamian Uruk. The birth of Jesus would then have taken place in the morning at the end of the month of Elul (August/September), when the crescent moon was visible for the last time and Venus for the first time or only a few days after her heliacal rising. The morning star would have been in conjunction with the Moon.

Is there a date that would fit this description? The morning of 28 August 2 BCE, four days before the nativity date found earlier by this author, would be correct. On the following day, for observers from Palestine, the crescent moon was scarcely $6\frac{1}{2}^{\circ}$ away from the Sun and therefore no longer visible. Incidentally, 28 August was exactly the day on which Venus actually became visible for the first time as the morning star.

Nonetheless, the interpretation of the "Woman of the Apocalypse" as Venus is probably a wrong track. Admittedly, it would make sense in the context of the Ishtar cult. However, in Revelation 22:16 it is specifically not the "Mother of God" but *Jesus* who is the morning star. As previously noted, both the Orthodox and the Roman Catholic Church contradict biblical statements by calling Mary "Morning Star". These churches have apparently adopted a heathen idea.

A Star in Virgo or a Virgin inside a Star?

Nevertheless, some clues are found in apocryphal texts and Bible commentaries in Syriac and Arabic that support the identification of the Star of Bethlehem with the Virgin Mary. A good example might be the "Cave of Treasures" by the Syrian saint Ephrem (4th cent.), chap. 7, which has already been cited further above. Let it be quoted again:

דים סוד גיו וואילו השיעיא באוארים שנים אואעו, לחיים בחביא לדיגמשאי. עום חסים לחי גיו לבחברא בוסעיאי ושדיאי ודינוסי בנחחיאי ועואח שליו דין בלחיים בחברא יילליא בגחת בו לבעיא לליא המעד א גאי בושח.

Two years before the Messiah was born, the star appeared to the magi; and they saw a star at the vault of heaven that was brighter in light, and whose appearance was greater, than all stars. And inside it was a virgin (or a girl) who held a boy; and a crown was laid on his head.⁶⁴⁷

This text clearly does not refer to the Apocalyptic Woman but to the Star of Bethlehem, and the virgin actually seems to be "inside" the star $(200)^{648}$, not the star within the constellation Virgo. Further above, this author had interpreted the girl inside the star as an indication that Mary was identified with the morning star. (pp. 236f.) Thus, did the magi have a vision and see a virgin with child inside the star? Alternatively, could it be clumsy language and actually mean that the star appeared in Virgo?

However, Ishôdad of Merv, a Nestorian bishop who lived in the 9th century, writes in his Bible commentary:

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החלה (בדבא אוצה שישיעי) בבטונא גובטונא גבטבא אוצה אי אי אי געור אי געור אי אי אי אי אי אי אי אי איגע אי אי איי
אישר אישר בכנישא גביאי באי געושי שישיע איי אי איי איי איי איי איי איי אייע אייע אייע אייע אייע אייע אייע אייע אי
בטבא געטא אושא גביאיי.
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And these [magi] came by the guidance of the image of a star: "behold, we have seen a star in the East", because in the middle of the star the image of a virgin appeared to them, who embraced her son.⁶⁴⁹

The same question can also be asked here: Do the virgin and her child appear inside the star, or is this a corrupt transmission of the idea that the Star of Bethlehem appeared in the constellation of Virgo?

Richard Gottheil translates the following passage from an unpublished Syriac manuscript, which is part of a ritual:

⁶⁴⁷ According to: Bezold, *Die Schatzhöhle*, p. 56, Syriac p. 232, Arabic p. 233.

⁶⁴⁸ The Arabic version reads: كوكبا ... في داخله صورة جارية شابة (op. cit., p. 233).

⁶⁴⁹ Gibson, *The Commentaries of Isho'dad of Merv, Bishop of Hadatha*, vol. 2, p. 26 (Syriac); Bd. 1, S. 15 (English).

Zardosht the prophet prophesied saying : A time will come, when they will see a star in the heavens having the likeness of a mother with a son in her arms. The time came and they saw the star. 650

Here, the star itself resembles a Madonna with child.

Another interesting passage is found in the "History of Dynasties" by the Syrian bishop Gregor Abu 'l-Farağ (Bar-Hebraeus, 13th cent.):

Zoroaster ... announced to them that at the end of time, a virgin would become pregnant with a foetus without being touched by a man. And at the time of his birth, a star would appear that would shine during the day, and in its surrounding (or: in its middle, (a_{23})) the figure of a virgin/girl would be seen.⁶⁵¹

Here, it is not quite clear whether the star is inside the virgin or the virgin appears inside the star. Arabic *wasatun* $(\underline{}_{uu})$ does not only mean "middle, centre", but also "surrounding". Thus it is a word of ambivalent meaning. $(\underline{}_{uu})$. The text could actually be interpreted in the sense that the star appeared in the constellation of Virgo. However, Pococke's Latin translation, which was published together with the Arabic text in 1663 and was referred to by some European scholars, chooses the meaning "middle" and renders the text in the sense that the figure of the virgin appears "in the middle" of the star (*in cujus medio*).

Also helpful may be a passage from the Ethiopian "Book of Adam and Eve" from the 5th or 6th century, which has already been cited earlier, but is given here again:

And when He was born at Bethlehem [in] the land of Judah, a star in the East made it known, and was seen by the Magi. That star shone in heaven, amid all other stars; *It flashed and was like the face of a woman*, a young virgin, sitting among the stars, flashing, as it were carrying a little child of beautiful countenance. From the beauty of His looks, both heaven and earth shone, and were filled with His beauty and light above and below; *and that child was on the virgin woman's arms; and there was a cloud of light around the child's head, like a crown.*⁶⁵²

There is talk of the Star of Bethlehem, and at first it is stated to have been "like the face of a woman". Thus, here again the star is identified with the

⁶⁵⁰ Gottheil, "References to Zoroaster in Syriac and Arabic Literature", p. 31.

⁶⁵¹ Pococke, *Gregorii Abul-Pharajii Historia compendiosa dynastiarum* (تاريخ), p. 83.

⁶⁵² Malan, *The Book of Adam and Eve*, IV,14, p. 204 (203-207). Cf. Cumont/ Bidez, *Les Mages hellénisés* II, pp. 123ff.. Ethiopian text in: Ernst Trumpp, *Der Kampf Adams*, pp. 167f.

virgin. However, in the second part of the passage one gets the impression that it rather refers to the constellation.

Does Revelation 12 accord with Jesus' Birth and Course of Life?

Until now, in interpreting Revelation 12 only astronomical and calendrical approaches have been discussed. The question of how well this difficult text accords with the birth and life of Jesus has been left open. For reasons of limited space, it is impossible to summarise all the proposed interpretations that have been put forward in answer to this question, and this author shall confine himself to stating his own understanding of the text.

Some experts doubt that Rev. 12 is about the birth of Jesus at all, and they do so for good reasons: A dragon is waiting for the child to be born in order to devour it, but immediately after it is born it is "caught up" to the throne of god. Does this fit Jesus? Is this an extremely abbreviated synopsis of the life of Jesus that ignores everything that happened between his birth and his ascension? Does the text see the history of salvation from a higher, *time-transcending* standpoint from which the earthly life of Jesus appears to shrink to almost nothing? This could be a valid interpretation, of course.

However\$ there are other options. A child messiah that is "caught up" to God immediately after its birth also appears in other apocalyptic texts of Judaism. The *Jerusalem Talmud* tells of the birth of a child named Menahem ben Hezekiah, who was "caught up" to God immediately and is expected to return at the end of days.⁶⁵³ Who was this Menahem ben Hezekiah in real life? He was a would-be Messiah who entered Jerusalem as the "king of the Jews" in 66 CE during a revolt against the Romans but soon after that was killed by the Jews themselves. His followers interpreted his death as his true birth as Messiah and postulated his being "caught up" to God.⁶⁵⁴

Something very similar apparently happened to Jesus. Through the crucifixion and resurrection he is really "born" as the Redeemer and Messiah.⁶⁵⁵

⁶⁵³ Jerusalem Talmud, pBerakh 2,4 (5a, 12).

⁶⁵⁴ According to an article by Hermann Detering, http://www.radikalkritik.de/ Cascioli.htm, 7th Jan. 2006.

⁶⁵⁵ Pablo Richard comes to similar conclusions: "Here, one should not think of Bethlehem, but rather of Calvary: of the labour-pains of the Messiah on the cross, the birth of the new human being on the cross." ("Besser denkt man hier also nicht an Bethlehem, sondern an Golgatha: an die Geburtswehen und -leiden des Messias am Kreuz, die Geburt des neuen Menschen am Kreuz." Richard, *Apokalypse: Das Buch von Hoffnung und Widerstand*, p. 153) Also to be mentioned is Elisabeth Schüssler Fiorenza, who understands the "birth" as the exaltation and enthronement of Jesus as

He overcomes evil, death, and the "dragon", and becomes king of a new world. Soon after that the ascension takes place. However, who is the "mother" who gives him *this spiritual birth*? Israel? Or humanity? Or could we even think of Mary standing beneath the cross, suffering with her son? Can her pain be compared with labour-pains?⁶⁵⁶

The fact that the woman "flees" into the "desert" could actually mean that the mourning Mary lives in solitude and desolation (p. 294). It may be objected that in John 19:25-27 the dying Jesus asks Mary and his "disciple whom he loved" to accept each other as mother and son. However, this also confirms that the theme of the being alone and desolate is in fact given.

Thus, two interpretations are possible. Either

- 1. the text wants to say that the Messiah is born and that later, *after his earthly life*, is caught up to the throne of God; or
- 2. the text refers to the fact that Jesus, *through the crucifixion and resurrection* was *really* "born" as the Messiah and shortly after that ascended to heaven.

For both interpretations one has to mentally elaborate slightly and add something that is not mentioned in the text but makes sense and, besides, has tradition behind it, viz. the words put in italics. It seems that both interpretations are equally valid, and for the present investigation it is not necessary to decide between them. They may contradict each other to some extent, but contradictions often occur in mythology. The logic of the soul is different.

The child "being caught up to heaven" shortly after its birth may also be linked to the metaphor of the "lamb standing as though it had been slain" ($\dot{\alpha}\rho\nu$ íov ἑστηκὸς ὡς ἐσφαγμένον, Rev. 5:6), which, in Christian liturgy, appears as the *agnus dei* or "Lamb of God". This title of Jesus connects him to the tradition of the Passover sacrificial lamb. According to Exodus 12:5 it had to be "without blemish, a male of the first year". The question arises whether the Messiah child "being caught up to heaven" might simply be a metaphor for his innocence and purity and have nothing to do with the age he was when he was crucified.

The enthronement of the child may also anticipate the following saying of Jesus:

the "first-born of the dead" ("der Erstgeborene der Toten"; vide Rev 1:5; Col 1:18) and as the beginning of a new creation. (Rev 21:1; 2 Cor. 5:17). (Schüssler Fiorenza, *Das Buch der Offenbarung*, p. 103)

⁶⁵⁶ "Medieval exegesis taught that because Mary conceived without sin, she did not suffer the pangs of childbirth. Yet, her compassionate pain beneath the cross was interpreted as the burthen of child bearing. ... Official teaching saw Mary as giving birth to the church in the world as she swooned beneath the cross." (Goodland, *Female Mourning in Medieval and Renaissance English Drama*, p. 74.)

όστις οὖν ταπεινώσει ἑαυτὸν ὡς τὸ παιδίον τοῦτο, οὖτός ἐστιν ὁ μείζων ἐν τῆ βασιλεία τῶν οὐρανῶν.

Whoever then humbles himself as this child, he is the greatest in the kingdom of heaven.⁶⁵⁷ (Matth 18:4, NASB)

Does Jesus speak of himself here?

As a result of the above investigations, the following conclusions can be drawn:

John sees a configuration of celestial bodies that tell of the birth of the Messiah. The *celestial* birth indicates the real birth of the Messiah *on earth*.

It follows that the celestial configuration is, at the same time, the astrological "birth chart" of the Messiah. This "birth chart" clearly implies that the person born at this moment in Palestine is the Messiah. Ancient astrology taught that the birth chart not only contained the complete biography but also the date of death. In what way was this the case?

The morning star is "born" from the radiance of the Sun in the sign of Virgo. It has been shown that, in ancient Israel, this celestial event symbolised the birth of the "anointed one", i.e. the birth of a king appointed by God – or the Messiah. At the same time, as has been shown, the disappearance of the evening star and the reappearance of the morning star stood for death and resurrection. The word "birth" might therefore be ambiguous in our text. It stands for the physical birth of the Messiah, and at the same time also for his "spiritual birth" at the moment of his death. Incidentally, it will be shown later that in the year 33 CE, near the possible date of crucifixion, Venus made an evening last and a morning first appearance, as was also the case at the time of his birth.

The second point in the chart that suggests that this was the Messiah is the child being "caught up". Astronomically speaking, this may refer to the fast ascent of the morning star. It has already been mentioned that no other celestial body ascends the sky as quickly as Venus does. In Jesus' life it might symbolise his Ascension to heaven.

There is no need to go into more detail about the meaning of Rev. 12. What is of importance for the present investigation is the fact that according to very old and very standard interpretations this text is about the birth of Jesus. Moreover, it has been shown that a plausible birth date can be deduced from it.

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⁶⁵⁷ cf. Matth 11:25, 18:2-5, 19:14, 21:15f., Mark 9:36f., 10:14-16, Luke 20:36, John 11:12f.

Summary

Besides Matthew 2, John's vision of the Woman of the Apocalypse in Revelation 12 also promises to provide information about the birth date of Jesus, because, evidently, it is a kind of *"birth horoscope" of Jesus*. However, only a small number of authors who have attempted to solve the mystery of the Star of Bethlehem have taken this biblical text into consideration, e.g., W. Papke and E. L. Martin.

John sees a woman appearing in the sky who is clothed with the Sun, has the Moon below her feet, and is about to give birth to a boy. The most likely astronomical interpretation of this image is that the Sun is in Virgo and the new moon crescent is located near her feet. The one she is giving birth to must be the morning star because, at the end of the Revelation, Jesus is called the "bright morning star". That means the morning star is making its heliacal rising. Furthermore, there is talk of a dragon that also rises and tries to swallow the child. The Archangel Michael defeats the dragon and saves the child. The dragon seems to represent the constellation of Hydra and Michael the constellation of Leo.

There is even a historical date that corresponds to this astronomical configuration and thus does justice to both Matthew 2 and Revelation 12: 1 September 2 BCE, in the morning at about 4:30 a.m. Furthermore, it has been found that this was New Year's day in the ancient Jewish calendar. That such a configuration did occur during the likely years of the birth of Jesus is a rare coincidence the kind of coincidence that might have caused astrologers of the 1st century CE to select this date for the birth of Jesus. Nonetheless, it would in fact have been an extraordinary coincidence (as long one does not believe in astrology or divine providence) if Jesus had actually been born on such an auspicious date.

Furthermore, it has been shown that the motif of the celestial virgin with a newborn child has its origin in the Egyptian cult of Isis. While this motif was forgotten in Europe, it was transmitted to Persia through a text of the Greek-Egyptian astrologer Teucer "of Babylon". It was reintroduced in Renaissance Europe through a Latin translation of a work of the Persian astrologer Abū Ma'šar. There, it fertilised the iconography of the Madonna as well as European authors such as Albertus Magnus, Roger Bacon, and Pierre d'Ailly, who derived speculations about the natal ascendant of Jesus from it.

More Pieces of the Puzzle

Several Stars in Ascent

Though only Venus was visible in the morning sky at the moment of Jesus' birth, the star chart shows that there was a conglomeration of planets in this area of the sky and, in fact, soon after Venus, Jupiter and Mars also made their heliacal rising.⁶⁵⁸ This display of ascending planets seems to be confirmed by a variant of the apocryphal Gospel of James. This variant from the oldest manuscript of the text speaks in a very apposite way not just of a star in the singular but of "stars" in the plural. The wording is:

καὶ θόρυβος ἐγένετο μέγας ἐν Βηθλὲμ τῆς Ἰουδαίας. Ἡλθωσαν γὰρ μάγοι λέγοντες Ποῦ ἐστιν ὁ βασιλεὺς τῶν Ἰουδαίων; Εἴδομεν γὰρ τὸν ἀστέρα αὐτοῦ ἐν τῆ ἀνατολῆ καὶ ἤλθαμεν προσκυνῆσαι αὐτῷ.

And in Bethlehem in Judea a great disturbance came about. For magi had arrived who said: "Where is the king of the Jews? For we have seen *his star* in its rising (east) and have come to bow down before him."

Καὶ ἀκούσας ὁ Ἡρώδης ἐταράχθη καὶ ἔπεμψεν ὑπηρέτας καὶ μετεπέμψατο αὐτοῦς καὶ διεσάφησαν αὐτῷ **περὶ τοῦ ἀστέρος**.

Venus: from 28 August 2 BCE, about 05.10h.

Jupiter: from 31 August 2 BCE, about 05.00h.

Mercury made its morning last appearance on 21 August.*

- Venus: on 31 August 2 BCE.
- Jupiter: on 5 September 2 BCE.
- Mars: on 18 September 2 BCE.

⁶⁵⁸ The dates of heliacal risings depend to a large extent on visibility, more precisely on the so-called extinction, a measure for the absorption and diffusion of light penetrating the atmosphere. Provided that the sky was cloudless and assuming a visibility of 100 km, they could have occurred around the following dates:

Mars: from 28 September 2 BCE about 05.00h.

However, according to the teachings of ancient astrologers, a planet had to be 15° away from the Sun, measured on its ecliptic, in order to become effective as a heliacal planet. The following dates result from this:

However, if the orbs of Firmicus Maternus, *Mathesis* 2.9, are used, the following dates result:

Venus: on 26 August 2 BCE (elongation 8°).

Jupiter: on 1 September 2 BCE (elongation 12°).

Mars: on 28 August 2 BCE (elongation 8°).

^{*}Calculations using routines of the Swiss Ephemeris by Victor Reijs and Dieter Koch, which essentially follow Bradley Schaefer's theory.

And when Herod heard this he was perturbed. And he sent servants and had them brought to him.⁶⁵⁹ And they explained to him about *the star*.

Καὶ ἰδοὺ εἶδον ἀστέρας ἐν τῇ ἀνατολῇ καὶ προῆγαν αὐτοὺς ἕως εἰσῆλθαν ἐν τῷ σπηλαίῳ.

And lo, they saw *stars* in rising (the east) and they *went ahead* of them until they (the stars? the magi?) entered the cave.

Kaì ἔστη ἐπὶ τὴν κεφαλὴν τοῦ παιδίου. Kaì ἰδόντες οἱ μάγοι ἑστῶτα μετὰ τῆς μητρὸς αὐτοῦ Μαρίας, ἐξέβαλον ἀπὸ τῆς πήρας αὐτῶν δῶρα χρυσὸν και λίβανον καὶ σμύρναν.

And it (the first star, D.K.) *remained standing*⁶⁶⁰ above the head of the boy. And when they saw it (the star, or: him, the boy; D.K.)⁶⁶¹ standing with his

"And he sent for the High Priests and asked them: 'Where will the Christ be born?' And they said: 'In Bethlehem in Judea, for so it is written.' And he let them go and asked the magi: 'What have you seen as a sign for a new-born king?' The magi answered: 'We have seen, that a very large star among other stars shone (ἀστέρα παμμεγέθη λάμψαντα ἐν τοῖς ἄστροις τούτοις), and it made them so pale that they were no longer shining (ἀμβλύνοντα αὐτοὺς τοῦ μὴ φανεῖν), and we recognised, that (to the people of) Israel a king was born, and that is why we came to bow down before him.' And Herod said: 'Go and search carefully for the child, and when it has been found, inform me, so that I, too, (can) come and bow down before it.' And the magi went out. And see, the star they had seen in its rising went ahead of them until it stood still in the cave at the head of the child. And when the magi saw it, they bowed down before it and its mother Mary, opened their treasures and brought their gifts, gold and incense and myrrh. And instructed by a holy angel not to go to Judea to Herod, they left for their country by another route." (Translation by the author, according to the original text in:

www-user.uni-bremen.de/~wie/texteapo/Jakobus%20Ev%20Greek.html)

⁶⁶⁰ This is a confusing change of the grammatical subject where the new subject is not identified. The verb is in singular form whereas the three verbs of the preceding sentence are in plural. The subject of the first verb are the magi, the subject of the second verb the stars, and the subject of the third verb must be either the magi or the stars. However, who is the new subject that belongs to the verb in singular? Obviously, it can only be the single star mentioned earlier. Ferrari believes it could be Joseph, who positions himself at the head of the child. (*Der Stern von Bethlehem*, p. 84) However, Joseph does not appear in the preceding lines, so that this suggestion is very unlikely. Also, it must be taken into account that in Matthew, it is the *star* that stands still.

⁶⁶¹ This is another confusing change of the grammatical subject. However, this time it is obvious that the magi are the subject. Nevertheless, there is a problem with the accusative object. Whom do they see "standing with Mary"? Ferrari believes they saw *Jesus* "standing" with Mary, and from this he draws the conclusion that Jesus must have been already about 10 months old when the magi arrived, because a newborn baby cannot walk or stand. However, in the preceding sentence, it is most likely the *star* that stands above the head of the child, and therefore they might be seeing the *star* standing with Mary, who held baby Jesus in her arms. This is also more

⁶⁵⁹ The common version of the Gospel of James continues from this point (21:2f.):

mother Mary, they fetched gifts from their travelling bags: gold, frankincense and myrrh.

Καὶ χρηματισθέντες ὑπὸ τοῦ ἀγγέλου διὰ ἄλλης ὁδοῦ ἀνεχώρησαν εἰς τὴν χώραν.

And warned by an angel, they returned to their country by another route. 662

At first, only *one* star which was seen in the east was mentioned. That star would have been Venus, the Star of the Messiah. However, on the day when Venus becomes stationary the magi suddenly see *several stars* in their rising. As Jupiter and Mars made their heliacal rising soon after Venus, this statement matches the facts very well. The magi now saw not only Venus but also Jupiter and Mars rising at the same time! In addition, the fact that only *one single* star was apparently stationary accords with the occurrences in the sky in those days. Only Venus was stationary, and, as against that, Jupiter and Mars moved direct for months after their heliacal rising before they came to be stationary.⁶⁶³

Adherents to the Jupiter-Saturn conjunction of 7 BCE refer to this text occasionally, especially when faced with the objection that Matthew writes about *only one star*, not the conjunction of two planets.⁶⁶⁴ However, James' text accords much better with the theory proposed in the present work. The Jupiter-Saturn supporters will have trouble explaining why first one, then several and then again only one star is mentioned. However, if the nativity date of 1 September 2 BCE proposed by this author is accepted, then the text becomes almost self-explanatory. The Gospel of James also makes it clear that there is only one Star of the Messiah, and it simply does not make sense to believe that the Star of the Messiah was supposed to have been a conjunction.

Also, the common version of the Gospel of James mentions a number of stars, for there it states:

plausible with regard to the traditional association of Mary with the star. The star points not only to the child, but also to the mother. As soon as the magi notice Mary, they unwrap their gifts, which, of course, they hand over to the mother, not the baby.

⁶⁶² *Papyrus-Codex Bodmer V. Nativité de Marie* (= Gospel of James), publié par Michel Testuz, Bibliotheca Bodmeriana, 1958, Cologny-Genève, p. 110ff. (p. 41ff., chap. XXI), Translation by the author.

⁶⁶³ In this text, προάγειν ("go ahead of") could not mean retrograde motion, as only Venus is in retrograde motion at her heliacal rising, whereas Jupiter and Mars are direct. The meaning of the verb here could be taken to be that the planets went ahead of *the Sun in their daily course*.

⁶⁶⁴ Hughes, p. 128f.; Ferrari d'Occhieppo, Der Stern von Bethlehem, pp. 81ff.

εἴδομεν ἀστέρα παμμεγέθη λάμψαντα ἐν τοῖς ἄστροις τούτοις καὶ ἀμβλύνοντα αὐτούς τοῦ μὴ φαίνειν.

We have seen that a very large star began to shine among these stars, and it made them so pale that they no longer shone, and we recognised that a king was born to (the people) of Israel. (Gospel of James 21:2)

This statement may be related to the fact that it was not just Venus rising, but also Mars and Jupiter. Nevertheless, Venus dominated them with her brightness. Thus, this also supports the nativity found in the present work.

Theodor Schmidt-Kaler has also mentioned a representation of the "annunciation at the well" according to the Gospel of James (chap. 11) which can be seen on the Mary's silk of the Abegg Foundation (Abeggstiftung) in Bern, Switzerland, a printed silk cloth from a Late Antiquity Egyptian grave.⁶⁶⁵ An angel appears to Mary, who is just about to bucket water, and greets her. Above one of his shoulders a crescent moon is shown with a star below it, and a third object to the right of it, which Schmidt-Kaler believes to be a second star. Lieselotte Kötzsche also believes it must be a second star.⁶⁶⁶ However, this may only be an illusion. The scene is repeated four times, and the third object is always quite different in appearance from the star. Either the stamper was damaged or else the third object is not a star but something different, perhaps the angel's wings.



"Annunciation at the Well", on the Mary's silk of the Abegg Foundation (Abeggstiftung) in Bern, Switzerland (according to Kötzsche, p. 184)

Incidentally, if the lunar crescent represents the old moon visible in the morning or the new moon crescent in the evening and if a star is standing *below* the crescent, then this indicates a first or last visibility of Venus. This can be concluded because the star must be very close to the Sun, although bright enough in order to be seen near the horizon, which is lit up by the twilight. More considerations on this configuration are made in the chapter "Crescent and Star" on pp. 334ff.

⁶⁶⁵ Schmidt-Kaler, "Der Stern und die Magier aus dem Morgenland", p. 33, referring to: Kötzsche, "Die Marienseide in der Abegg-Stiftung", Abb. 1, p. 184 (not Abb. 5, as wrongly stated by Schmidt-Kaler) as well as the description on pp. 188f.
⁶⁶⁶ Vide previous footnote.

Luke and the Star of the Messiah

At first sight, the evangelist Luke seems to know nothing about the Star of the Messiah, which seems surprising. However, just as in the case of the "light shining in darkness" in the Gospel of John, a thorough look proves worthwhile. As has been pointed out earlier, Luke 1:78 mentions a "rising from on high" (ἀνατολὴ ἐξ ὕψους). It seems clear that this is an allusion to the star of Jesus' birth, and it indicates that Luke did actually know about the legend of this star. In addition, the story of the shepherds and the shining angel seems to be simply a variation of the same legend. The text reads as follows:

(8) Καὶ ποιμένες ἦσαν ἐν τῆ χώρα τῆ αὐτῆ ἀγραυλοῦντες καὶ φυλάσσοντες φυλακὰς τῆς νυκτὸς ἐπὶ τὴν ποίμνην αὐτῶν. (9) καὶ ἄγγελος κυρίου ἐπέστη αὐτοῖς καὶ δόξα κυρίου περιέλαμψεν αὐτούς, καὶ ἐφοβήθησαν φόβον μέγαν. (10) καὶ ἐἶπεν αὐτοῖς ὁ ἄγγελος· Μὴ φοβεῖσθε, ἰδοὺ γὰρ εὐαγγελίζομαι ὑμῖν χαρὰν μεγάλην ἥτις ἔσται παντὶ τῷ λαῷ, (11) ὅτι ἐτέχθη ὑμῖν σήμερον σωτὴρ ὅς ἐστιν χριστὸς κύριος ἐν πόλει Δαυίδ· (12) καὶ τοῦτο ὑμῖν τὸ σημεῖον, εὑρήσετε βρέφος ἐσπαργανωμένον καὶ κείμενον ἐν φάτνῃ. (13) καὶ ἐξαίφνης ἐγένετο σὺν τῷ ἀγγέλῷ πλῆθος στρατιᾶς οὐρανίου αἰνούντων τὸν θεὸν καὶ λεγόντων· (14) Δόξα ἐν ὑψίστοις θεῷ καὶ ἐπὶ γῆς εἰρήνη ἐν ἀνθρώποις εὐδοκίας. (15) Καὶ ἐγένετο ὡς ἀπῆλθον ἀπ' αὐτῶν εἰς τὸν οὐρανὸν οἱ ἄγγελοι, οἱ ποιμένες ἐλάλουν πρὸς ἀλλήλους· Διέλθωμεν δὴ ἕως Βηθλέεμ καὶ ἴδωμεν τὸ ῥῆμα τοῦτο τὸ γεγονὸς ὃ ὁ κύριος ἐγνώρισεν ἡμῖν. (16) καὶ ἦλθαν σπεύσαντες καὶ ἀνεῦραν τήν τε Μαριὰμ καὶ τὸν Ἰωσὴφ καὶ τὸ βρέφος κείμενον ἐν τῷ φάτνῃ.

(8) In the same region there were some shepherds staying out in the fields and keeping watch over their flock by night. (9) And an angel of the Lord suddenly stood before them, and the glory of the Lord *shone around* them; and they were terribly frightened. (10) But the angel said to them, "Do not be afraid; for behold, I bring you good news of great joy which will be for all the people; (11) for today in the city of David there has been born for you a Saviour, who is Christ the Lord. (12) This will be a sign for you: you will find a baby wrapped in cloths and lying in a manger." (13) And suddenly *there appeared with the angel a multitude of the heavenly host* praising God and saying, (14) "Glory to God in the highest, And on earth peace among men with whom He is pleased." (15) When *the angels had gone away from them into heaven*, the shepherds began saying to one another, "Let us go straight to Bethlehem then, and see this thing that has happened which the Lord has made known to us." (16) So they came in a hurry and found their way to Mary and Joseph, and the baby as He lay in the manger. (Luke 2:8-16; NASB)

This text which at first appears to be very different from the legend of the birth Star of Jesus still shows a remarkable resemblance to it. First, an angel is mentioned who, accompanied by a frightening *appearance of light* (verse 9), comes to the shepherds in the field and announces the birth of the Christ child. Then the shepherds set off for Bethlehem to visit the infant. Their action

is similar to that of the magi. They follow the words of a light and its prophecy, look for the child in the place of his birth, and worship him.

Is the angel whom Luke describes therefore the star? The very powerful light that appeared can be linked with the star indicating the birth in the apocryphal Gospel of James. Here, too, the brilliance of the star is described as very powerful.

εἴδομεν ἀστέρα παμμεγέθη λάμψαντα ἐν τοῖς ἄστροις τούτοις καὶ ἀμβλύνοντα αὐτούς τοῦ μὴ φαίνειν.

"We have seen that a very large star shone among these other stars causing them to appear so pale that they did not shine anymore." (Gospel of James, 21:2).

Also, when the Bodmer Papyrus of the Gospel of James tells of other stars that were seen with the first star, this is parallel to Luke's mentioning other angels that join the first one (2:13). And when angels ascend to heaven in Luke's account (2:15), then this can be interpreted as their morning rising and their rising higher daily.

In the New Testament angels appear as stars in other places.⁶⁶⁷ In the *Arabic Infancy Gospel* it is also supposed that the star was an angel:

وكان لما اتلد الرب يسوع فى بيت لحم يهودا على عهد ايروديس الملك اذ مجوس رافوا من المشرق الى يروشليم كما تنبا زرادشت وكان معهم القرابين الذهب واللبان والمرر فسجدوا له وقربوا له قرابينهم حينيذ اخذت مرت مريم احد اولايك القمط ودفعته لهم بحسب لبركة فقبلوه منها احسن قبول وفى تلك الساعة <u>ظهر لهم ملاك شبه الكوكب</u> الذى كان دليلهم اولا فمضوا مهتدين بنوره حتى وصلوا بلادهم

When the Lord Jesus was born in Bethlehem in Judea at the time of King Herod, wise men came to Bethlehem from the orient as Zoroaster had prophesied. And they brought gifts with them: gold, frankincense and myrrh. And they worshipped the child and offered him the gifts. Then Holy Mary took one of the swaddling cloths and handed it to them as a sign of blessing. And they accepted it from her with greatest gratitude. And at that very moment *an angel appeared* (or: *rose*; *it to them that resembled the star that had been their guide* (or: sign; *it previously*. And they went away, led by its light, until they arrived in their own country.⁶⁶⁸

And in the Heliand it says:

... / gisâhun finistri an tuuê telâtan an lufte, / endi quam lioht godes uuânum thurh thiu uuolcan / endi thea uuardos thar

⁶⁶⁷ Mt 24:29; Mk 13:25; Jude 1:13; Rev. 1:20; 9:1.

⁶⁶⁸ Thilo, *Codex apocryphus Novi Testamenti*, vol. 1, pp. 70-71; cf. Peeters, *Évangiles apocryphes*, vol. II, "Le livre des miracles de Notre-Seigneur, maitre et sauveur Jésus-Christ, lequel livre est appelé « L' évangile de l'enfance »", chap. 7, p. 9.

bifeng an them felda. ... / gisâhun thar mahtigna godes engil cuman, / the im [tegegnes] sprac, ... / they saw the darkness (torn) in two, and it ceased in the heights; / and the light of God came through the clouds delightfully, / and the guards there in the field were embraced by it There they saw the mighty angel of God come / and he spoke to them...⁶⁶⁹

The symbolism of the *shepherds* also deserves a closer examination. In a church *priests* are referred to as "shepherds" and Jesus himself is called "the good shepherd" (ó $\pi \circ \mu \eta \eta v$ ó $\kappa \alpha \lambda \circ \zeta$, Joh. 10:11). In the Old Testament Josef, Moses, and Joshua are considered to be "shepherds of Israel" (לְשָה אֶבֶן יִשְׂרָאֶל), Genesis 49:24; Numbers 27:17), and in other places the leaders of Israel are called the "shepherds" of God (e.g. Jeremy 3:15; 23:1ff.). In Isaiah, Yahweh calls the Persian king Cyrus, who liberated the Jews from the Babylonian exile, his "shepherd" and "Messiah" (לֵשָה אָבֶר לְפָה אָבָר לָפָר אָבָר אָביר אָבָר אָביר אָבָר אָבָר אָבָר אָבָר אָבָר אָביר אַביר אָביר אָביר אָביר אָביר אָביר אַביר אַביר אָביר אַביר אָביר אָביר אָביר אָביר אַביר אָביר אָביר אָ

所町 ④ 町 マ 〒 ト 延 戸 ⑪ 戸 ピ み キャー 平 rē'û kīnu ša ina šulmi itnarrû ba'ūlāt māt aššur,

"the good/righteous shepherd, who leads the people of the land of Aššur in wellbeing/safety".

⁶⁶⁹ Heliand 390-395, original text according to the edition by Behagel/Taeger.

⁶⁷⁰ George, The Babylonian Gilgamesh Epic, SB I, 87, p. 542f.

⁶⁷¹ In a stone inscription, the Assyrian king Salmanassar III (9th cent. BCE) is described as follows (according to Grayson, *Assyrian Rulers of the Early First Mill-ennium BC*, II, S. 7):

A little later, it says:

enūma aššur bēlu rabû ina kūn libbišu ina īnīšu ellī uddânnima ana rē'ût māt aššur ibbânni kakka dannu mušamqit lā māgirī ušatmihannima agâ sīra uppira bēlūti naphar mātāti lā māgirūt aššur ana pêli u šuknuši aggiš uma''iranni

[&]quot;When Aššur, the great lord, in the firmness of his heart [and] in his holy eyes, designated me [as king and] nominated me for the shepherdship over the land of Aššur, he gave a strong weapon into my hand that brings down the obstinate ones, put a crown on my head, and angrily entrusted me with the rulership so that I rule and subdue all lands of those who do not obey Aššur."

This comparison of the God-chosen king with a shepherd, and the people with a flock of sheep, obviously lives on in the Christian metaphor of the shepherd and his sheep, where "King" Jesus or the priest is the "shepherd" and the believers are the "sheep". Tammuz-Dumuzi, the Babylonian dying and resurrecting lover of the Venus goddess Ishtar, was also considered both a shepherd and a king at the same time. Kings, priests, and shepherds are thus the same. Now, the *magoi* were priests from the East. Could they have held the title of a "shepherd" and be identified with the "shepherds" of Luke? Also, it seems to make good sense when the tradition recognizes the magi as "three holy kings" in the context of the symbolical association shepherd = priest = king.

This leads to the conclusion that *the angel and the shepherds according to Luke are the same as the star and the magi (kings) according to Matthew.* Because Matthew says not a word about the story of the shepherds, and Luke remains silent regarding the story of the *magi*, it must be concluded that *the tales are independent variations of the same theme.*

Some authors have taken the presence of shepherds in the fields at night as a clue for the season in which Jesus was born. For the reasons given above, this approach may be wrong.

Virgin Birth

Seeing that Jesus was born under the sign of Virgo, the question arises as to whether the teaching about the virgin birth originated here. An interesting detail concerning the celestial occurrences on that day is that Venus does not rise from the virgin's lap, but from her head. This may signify an "immaculate" birth or a "spiritual" birth.

In Matthew, the story of the pregnant Virgin Mary, mother of Jesus, is found just before the story of the Star of the Messiah. In this way the Gospel of Matthew contains enough information for ascertaining the date of Jesus' birth to within a few days. In the Revelation of John, only the precise position of the Moon is added, which suggests the precise day.

The verses relating to the virgin read like this in Matthew:

(18) Τοῦ δὲ Ἰησοῦ χριστοῦ ἡ γένεσις οὕτως ἦν. μνηστευθείσης τῆς μητρὸς αὐτοῦ Μαρίας τῷ Ἰωσήφ, πρὶν ἢ συνελθεῖν αὐτοὺς εὑρέθη ἐν γαστρὶ ἔχουσα ἐκ πνεύματος ἀγίου.

(18) Now this is how the birth of Jesus came about: When his mother Mary was betrothed to Joseph, but before they lived together, she was found with child through the Holy Spirit.

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One gets the impression that this Assyrian theocracy is the model of the Israelite theocracy.

(19) Ίωσὴφ δὲ ὁ ἀνὴρ αὐτῆς, δίκαιος ὣν καὶ μὴ θέλων αὐτὴν δειγματίσαι, ἐβουλήθη λάθρα ἀπολῦσαι αὐτήν.

(19) Joseph, her husband, since he was a righteous man and unwilling to expose her to shame, decided to let her go quietly.

(20) ταῦτα δὲ αὐτοῦ ἐνθυμηθέντος ἰδοὺ ἄγγελος κυρίου κατ' ὄναρ ἐφάνη αὐτῷ λέγων· Ἰωσὴφ υἰὸς Δαυίδ, μὴ φοβηθῆς παραλαβεῖν Μαρίαν τὴν γυναῖκά σου, τὸ γὰρ ἐν αὐτῆ γεννηθὲν ἐκ πνεύματός ἐστιν άγίου·

(20) While he was considering this, see, an angel of the Lord appeared to him in a dream, and said: Joseph, son of David, do not be afraid to take Mary your wife into your home, for what has been begotten in her is from the Holy Spirit.

(21) τέξεται δὲ υἰὸν καὶ καλέσεις τὸ ὄνομα αὐτοῦ Ἰησοῦν, αὐτὸς γὰρ σώσει τὸν λαὸν αὐτοῦ ἀπὸ τῶν ἁμαρτιῶν αὐτῶν.

(21) And she will give birth to a son, and you shall name him Jesus, because he will save his people from their sin.

(22) τοῦτο δὲ ὅλον γέγονεν ἵνα πληρωθῆ τὸ ἑηθὲν ὑπὸ κυρίου διὰ τοῦ προφήτου λέγοντος·

(22) All this happened to fulfil what the Lord spoke though the prophet, who says:

(23) Ίδοὺ ἡ παρθένος ἐν γαστρὶ ἕξει καὶ τέξεται υἰόν, καὶ καλέσουσιν τὸ ὄνομα αὐτοῦ Ἐμμανουήλ· ὅ ἐστιν μεθερμηνευόμενον Μεθ' ἡμῶν ὁ θεός.

(23) "See, *a virgin will conceive and give birth to a son*, and they shall call his name Emmanuel", which is translated: God with us.

(24) έγερθεὶς δὲ ὁ Ἰωσὴφ ἀπὸ τοῦ ὕπνου ἐποίησεν ὡς προσέταξεν αὐτῷ ὁ ἀγγελος κυρίου καὶ παρέλαβεν τὴν γυναῖκα αὐτοῦ·

(24) But Joseph, waking from sleep, did what the angel of the Lord had commanded him and took his wife into his home;

(25) καὶ οὐκ ἐγίνωσκεν αὐτὴν ἕως οὖ ἔτεκεν υἰόν· καὶ ἐκάλεσεν τὸ ὄνομα αὐτοῦ Ἰησοῦν.

(25) And he did not know her (intimately), until she had given birth to her first-born son; and he called his name Jesus. (Matthew 1:18ff.; cf. also Luke 1:26ff.)

It seems that all this need not be taken literally. If we look at it from an astrological point of view, and assume that Jesus was born in Virgo, we can also (although we need not) assume that he was conceived in the natural way.

However, Matthew and Luke believed that Jesus was actually born from a virgin, and here, too, as with the legend of the star, they believe this was predicted by an Old Testament prophecy. In fact, the text of Matthew reads like an attempt to prove that Jesus fulfils all Old Testament prophecies concerning the Messiah.

The Old Testament prophecy referred to by the angel is found in Isaiah, chapter 7. In the year 735 BCE the Southern Jewish kingdom of Judah, under king Ahaz, was threatened by an alliance of the Syrian king, Rezin, and Pekah, the king of the Northern kingdom of Israel. The prophet Isaiah

went to the desperate King Ahaz and brought him the message that was revealed to him by Yahweh, saying that Judah would not be conquered by its enemies. The text then continues:

10 וַיּוֹסֶף יְהוָה דַּבֵּר אֶל־אָחָז לֵאמֹר:

(10) And Yahweh continued to speak to Ahas and said:

11 שִׁאַל־לְךָ אות מֵעַם יְהוֶה אֱלֹהֶיךָ הַעֲמֵק שְׁאָלָה או הַגְבֵה לְמָעְלָה:

(11) Ask for a sign from the Lord, your God; ask it from the depth or from the height above.

12 וַיּאֹמֶר אָחָז לאֹ־אֶשְׁאַל וְלאֹ־אָנַסֶה אֶת־יְהוָה:

(12) And Ahas said: I will not ask, I will not tempt the Lord.

13 וַיֹּאמֶר שָׁמְעוּ־נָא בֵּית דָּוָד הַמְעַט מְכֶם הַלְאוֹת אֲנָשִׁים כִּי תַלְאוּ גַּם אֶת־אֱלֹהָי:

(13) Then He said: Listen, o house of David! Is it not enough for you to weary men, must you also weary my God?

14 לְכֵן יְתֵּן אֲדֹנִי הוּא לָכֶם אות הְנֵה **הַעַלְמָה הָרָה וִיֹלְדֵת בֵּן** וְקָרָאת שְׁמׂו עִמָּנוּ אֵל:

(14) Therefore the Lord himself will give you this sign: See, *a virgin will be with child, and bear a son*, and shall name him Emmanuel.

15 חֶמְאָה וּדְבַשׁ יאֹכֵל לְדַעְתָּו מָאָוס בָּרָע וּבָחָור בַּטְּוב:

(15) Cream and honey shall he eat, until he knows to reject the bad and choose the good.

ד כִּי בְּטֶרֶם יֵדַע הַנַּעַר מָאֹס בָּרָע וּבָחֹר בַּטּוב תַּעָזֵב הָאָדָמָה אֲשֶׁר אַתָּה קֵץ מַנִי מְלֶכֶיהָ: מִפְּנֵי שְׁנֵי מְלֶכֶיהָ:

(16) For before a boy knows to reject the bad and choose the good, the land of the two kings whom you dread shall be left desolate.

דָבִיא יְהוָה עֶלֶיךּ וְעַל־עַמְךּ וְעַל־בֵּית אָבִיךּ יָמִים אֲשֶׁר לֹא־בָאוּ לְמִיּום 17 יָבִיא יְהוָה אֶלֶיר מַעַליְהוּדָה אֵת מֶלֶף אַשׁוּר:

(17) Yahweh shall bring on you and your people and your father's house days like they have not been since the day Ephraim seceded from Judah, he will bring the King of Assyria. (Isaiah 7:10 ff.)

In fact, there is not the least hint that a "virginal conception" or the Messiah is being prophesied, and ancient Jews also did not generally interpret the text in this way. First of all, it is a completely natural process for virgins to become pregnant, namely at that point, when they sleep with a man and fertilisation takes place immediately. The birth of the boy and the statement "before he knows to reject the bad" and so on was simply a "sign" of the time when the Assyrians would conquer the enemies of Ahas and Ahas' own country. Moreover, in the next chapter (Isaiah 8:3ff.) it is stated that Isaiah himself is fathering a child with a prophetess, and shortly after the child's birth the Assyrians arrive and Isaiah's prophecy comes true.

The interpretation that this text refers to Jesus is impossible because of the mention of the Assyrians, and also because in verses 8 and 9 and further on

it says that the Northern kingdom will be "destroyed in 65 years and there shall no longer be a nation".

Isaiah 7:14 is thus not a prophecy of the Messiah, although Matthew explicitly makes this connection, and one has to twist the text to understand it in that way. Why was this connection made?

From time immemorial peoples of the ancient Orient and also Greeks and Romans believed that great kings, prophets, and demi-gods did not have a father or were born out of wedlock or by incest or fathered by a god. The Gilgamesh Epic relates that King Gilgamesh lived with his mother. His father, the god Lugalbanda, plays no role at all and is only mentioned where Gilgamesh offers a sacrifice to him. King Sargon I claims to be the son of a priestess and an unknown father. Assurbanipal asserts that he does not know his father or mother and that he grew up on the lap of the goddess Ishtar. The Egyptian divine hero Horus was allegedly born from a union of the goddess Isis with the dead body of her husband Osiris. Adonis was born from an incestuous union of a virgin princess with her father. The Greek demi-god Hercules was fathered by Zeus with a mortal woman. In Athens there were rumours that Plato was actually fathered by the god Apollo, and in Rome the twins Romulus and Remus were engendered by the god Mars. Many more examples could be given.

Great prophets and leaders of Israel also had to go without parents, even when they had been procreated in a natural way. Moses was abandoned as a newborn and adopted by an Egyptian princess. He did not know his father and mother. Abraham was abandoned in a cave and "breastfed" himself, sucking his thumb. Although these are not virgin births, it is obvious that Jesus belongs, and actually *had to belong*, to the same category. He had no human father, who reared him.

Here it should be noted that young people who were destined to exert great culture-constituting influence on humanity often had to step out of their parents' "shadow" and even had to fall out with them. Unlike today, fathers and mothers used to determine the course of their children's lives. Statements such as "you are not my son" or "you are not my father" may have been uttered in this context. In any case, the gospels report that there was a rift between Jesus and his parents. At the age of 12 years he uncompromisingly disregarded his parents' will and cut his own path (Lk 2:41-52). Although Luke adds that after that episode Jesus began to submit to his parents and that Mary also kept his words in her heart (kai ή μήτηρ αὐτοῦ διετήρει πάντα τὰ ῥήματα ταῦτα ἐν τῇ καρδία αὐτῆς), it seems that Joseph did not show understanding for Jesus' relationship with his mother was very reserved. He did not call her "mother", but "woman", as if she had not been his mother at all (John 2:4; cf. John 19:26).

Apart from that, Luke reports the following statement of Jesus:

Εἴ τις ἕρχεται πρός με καὶ οὐ μισεῖ τὸν πατέρα ἑαυτοῦ καὶ τὴν μητέρα καὶ τὴν γυναῖκα καὶ τὰ τέκνα καὶ τοὺς ἀδελφοὺς καὶ τὰς ἀδελφάς, ἔτι τε καὶ τὴν ψυχὴν ἑαυτοῦ, οὐ δύναται εἶναί μου μαθητής.

If somebody comes to me and does not hate his own father and his mother and his wife and his children and his brothers and his sisters and, in addition, also his own life/soul, [then] he/she cannot be my disciple. (Lk 14:26)

And in Matthew, he says:

ό φιλῶν πατέρα ἢ μητέρα ὑπὲρ ἐμὲ οὐκ ἔστιν μου ἄξιος· καὶ ὁ φιλῶν υίὸν ἢ θυγατέρα ὑπὲρ ἐμὲ οὐκ ἔστιν μου ἄξιος·

He who loves father or mother above me, is not worthy of me, and he who loves son or daughter above me, is not worthy of me. (Matt 10:37)

Also worth mentioning is Matthew 12:46ff. (cf. Mark 3:31-35):

⁴⁶ Έτι δὲ αὐτοῦ λαλοῦντος τοῖς ὄχλοις ἰδοὺ ἡ μήτηρ καὶ οἱ ἀδελφοὶ αὐτοῦ εἰστήκεισαν ἔξω ζητοῦντες αὐτῷ λαλῆσαι.

⁴⁶ While he was still speaking to the multitudes, behold, his mother and his brothers stood outside, seeking to speak to him.

⁴⁷ εἶπεν δέ τις αὐτῷ· Ἰδοὺ ἡ μήτηρ σου καὶ οἱ ἀδελφοί σου ἔξω ἑστήκασιν, ζητοῦντές σοι λαλῆσαι.

⁴⁷ Somebody said to him: "Behold, your mother and your brothers stand outside, seeking to speak to you."

⁴⁸ ὁ δὲ ἀποκριθεὶς εἶπεν τῷ λέγοντι αὐτῷ· Τίς ἐστιν ἡ μήτηρ μου, καὶ τίνες εἰσὶν οἱ ἀδελφοί μου;

⁴⁸ But he answered him who spoke to him: "Who is my mother? and who are my brothers?"

 49 καὶ ἐκτείνας τὴν χεῖρα αὐτοῦ ἐπὶ τοὺς μαθητὰς αὐτοῦ εἶπεν· Ἰδοὺ ἡ μήτηρ μου καὶ οἱ ἀδελφοί μου·

⁴⁹ And he stretched out his hand towards his disciples and said: "Behold, my mother and my brothers!

 50 ὅστις γὰρ ἂν ποιήσῃ τὸ θέλημα τοῦ πατρός μου τοῦ ἐν οὐρανοῖς, αὐτός μου ἀδελφὸς καὶ ἀδελφὴ καὶ μήτῃρ ἐστίν.

⁵⁰ For whoever does the will of my Father in heaven, he is my brother, and sister, and mother!"

And Mark 6:3-4:

³ οὐχ οὖτός ἐστιν ὁ τέκτων, ὁ υἰὸς τῆς Μαρίας καὶ ἀδελφὸς Ἰακώβου καὶ Ἰωσῆτος καὶ Ἰούδα καὶ Σίμωνος; καὶ οὐκ εἰσὶν αἱ ἀδελφαὶ αὐτοῦ ὦδε πρὸς ἡμᾶς; καὶ ἐσκανδαλίζοντο ἐν αὐτῷ.

³ Isn't this the carpenter, the son of Mary and brother of James and Joses and Judah and Simon? And aren't his sisters here with us?" They were offended at him.

⁴ καὶ ἕλεγεν αὐτοῖς ὁ Ἰησοῦς ὅτι Οὐκ ἔστιν προφήτης ἄτιμος εἰ μὴ ἐν τῆ πατρίδι αὐτοῦ καὶ ἐν τοῖς συγγενεῦσιν αὐτοῦ καὶ ἐν τῆ οἰκία αὐτοῦ.

⁴ And Jesus said to them, "A prophet is not without honour, except in his own country and among his own relatives, and in his own house."

The father is not mentioned at this point. Had he died already? Had he never acknowledged Jesus as his son? Or did Jesus and Joseph not want to have to do anything with each other? However, Mary and his siblings were not among Jesus' disciples either, but came to him as his "family" to speak to him.

It seems, however, that the Evangelists did believe in the virgin birth. There is no clue that they were aware of the possibility that the "virgin birth" could be a metaphor for the rift between Jesus and his father. Nor were they aware of a possible astrological interpretation, namely that Jesus could have been born when the Sun was in Virgo. On the other hand, John of Patmos, the author of the Revelation, seems to have known this interpretation. The image of the Woman of the Apocalypse proves that this idea was current in early Christianity.

"A Star and a Sceptre"

Christians believe that the so-called Old Testament Balaam prophecy refers to the birth of Jesus:

דְּרַךְ כּוֹכָב מִיַּעֲקֹב וְקָם **שֵׁבֶט** מִיִּשְׂרָאֵל

A star shall arise from Jacob and a sceptre shall rise from Israel... (Nu 24:17)

Ernest L. Martin believes that the "star" and the "sceptre" represent the star Regulus. At least, the following verse from Genesis seems to indicate it:

גּוּר אַרְיֵה יְהוּדָה ... לֹא־יָסוּר **שׁבֶט** מִיהוּדָה וּמְחֹקֵק מִבֵּין רַגְלָיו עַד כִּי־יָבאׁ שִׁילו וְלוֹ יִקְהַת עַמִים

Judah is a young lion.... the sceptre shall not depart from Judah, or the ruler's staff from between his feet, until Shiloh (= the Messiah?) comes, and the nations shall obey him. (Gen. 49:9-10)

According to Martin the "lion" represents the zodiac sign of Leo, and the "ruler's staff" stands for the royal star Regulus. This interpretation, which he has adopted from Alfred Jeremias and Roger Sinnot⁶⁷², seems quite persuasive because Regulus, together with the stars forming the mane of the lion, outlines a type of sceptre similar to the one carried by gods, kings and priests througout practically the entire ancient world, from Egypt to Mesopotamia to Anatolia and Rome: the bent or shepherd's crook (Akkadian *gamlu*, Hittite *kalmuš*, Egyptian *hq3t*, Latin *lituus*). Today this sceptre, in the form of a crook, survives in the hands of Catholic dignitaries.

⁶⁷² The Star that Astonished the World, p. 50f. Martin's sources are: Jeremias, The Old Testament in the Light of the Ancient East, 148; Sinnott, Sky and Telescope, December, 1968, 384–386.



Coffin cover of Tutankhamen, showing scourge and shepherd's crook: In Egyptian, this last one is called *heqat*, which also means "authority". The Pharaoh's headgear is reminiscent of a lion's mane. Compare this picture to the star map on p. 357. There the mane of Leo resembles a *heqat-sceptre*. Here, too, a lion's mane is shown together with the same kind of sceptre.

If Balaam had meant the "star" and the "sceptre" to represent Regulus and the mane of Leo, and if the Star of Bethlehem was linked to this prophecy, then, of course, the Star of Bethlehem could not be Venus. However, the prophecy could also mean that the "star" is Venus as the morning star, and the "sceptre" is Regulus and the mane of Leo, since both rise at approximately at the same time. It is interesting that Venus, at her heliacal rising in 2 BCE on the day of Jesus' birth, was positioned under the feet of Leo and about 18° below Regulus. Could this have been the meaning of Balaam's words?

Balaam's words do, in fact, sound more like a concurrent heliacal rising of the star and the sceptre. And, in addition, it sounds as though *first* the star and *then* the sceptre appeared. Therefore, Balaam's prophecy does not fully agree with the configuration in 2 BCE. Depending on atmospheric conditions such as cloud cover and visibility, Regulus appeared seven to ten days before Venus.

Nevertheless, the connection between the Balaam prophecy and the configuration on the morning of 1 September 2 BCE is striking. The eastern morning sky looked as follows:



The diagram shows Venus and the sceptre—Leo's mane with Regulus—on the eastern horizon on 1 September 2 BCE just before sunrise. The remainder of Leo was not visible because the faint stars in that part were too close to the horizon, which was already brightening. *Only Venus and the sceptre were visible*. Thus the two of them dominated the morning sky. Incidentally, this situation could be the reason why Balaam did not speak of the "star in Leo" but of "star and sceptre". If the sceptre and the star appeared before sunrise, the rest of Leo remained invisible. For this reason the configuration on this morning accords with the details of Balaam's prophecy remarkably well. Although synchronic risings of Regulus and Venus occurred in other years such as 31 CE, they would usually be incompatible with a Virgo birth such as is needed for Jesus' horoscope since the Sun was in Leo.⁶⁷³

An association of Leo with the morning star is also found in Revelation. Compare the following two verses:

Έγὼ Ίησοῦς ... εἰμι ἡ ῥίζα καὶ τὸ γένος Δαυίδ, ὁ ἀστὴρ ὁ λαμπρὸς ὁ πρωϊνός. I, Jesus,... am the root and the descendant of David, the bright morning star. (Rev. 22:16)

⁶⁷³ If Venus had not had the high southern latitude she would have appeared much closer to the stomach of Leo in one line with Jupiter and Regulus. Possibly ancient astrologers expected her in that precise position, because ephemeris calculation in those days ignored the ecliptic latitude of celestial bodies.

ίδοὺ ἐνίκησεν ὁ λέων ὁ ἐκ τῆς φυλῆς Ἰούδα, ἡ ῥίζα Δαυίδ, ἀνοῖξαι τὸ βιβλίον...

Behold, the Lion that is from the tribe of Judah, the Root of David, has overcome so as to open the book and its seven seals \dots (Rev. 5:5)

In both verses Jesus is called the "Root of David". In the first one he is also given the epithet "morning star", in the second one "Lion". Does this indicate that the morning star rises heliacally in Leo, exactly as in the sky map shown above?

On closer examination, it even appears that Gen. 49:9 describes a heliacal setting and subsequent rising:

גָּוּר אַרְיֵה יְהוּדָׂה מַטֶּרֶף בְּגֵי עָלֵיתָ כָּרַע רָבָץ כְּאַרְיֵה וּכְלָבָיא מֵי יְקִימֶנּוּ:

σκύμνος λέοντος Ιουδα[.] ἐκ βλαστοῦ, υἰέ μου, ἀνέβης[.] ἀναπεσὼν ἐκοιμήθης ὡς λέων καὶ ὡς σκύμνος[.] τίς ἐγερεῖ αὐτόν;

Judah is a young lion;

from [the meal of your] prey (Septuagint: from the sprout), my son, you have arisen.

He has sunk down, has lain down like a lion [;]

and like a lioness (*Septuagint:* like a young [lion]) – who will make him stand up? (Gen. 49:9)

If the lion is the constellation of Leo—as can be concluded from the subsequent verse, where it has a sceptre between its feet—then it is very likely that the "sinking down" and "lying down" and the "standing up" again stand for the heliacal setting and rising of Leo. The punctuation at the end of the third line is uncertain. Perhaps the whole fourth line makes a complete sentence to be translated as: "Who will make him stand up as a whelp." That he is designated as a "whelp" may be explained by the fact that the heliacal rising of a star was compared to a "birth".

Joseph's dream

It has been shown in detail that in the Old Testament and in other Jewish writing a number of references indicate that the birth and accession to power of the kings of Israel were associated with a heliacal rising of Venus. For example, in Psalm 80 (discussed earlier on pp. 277f.), Yahweh, the Lord of Hosts, or his angel appears as a star leading Joseph and his people – apparently similar to how he led Moses and the Israelites. In addition, the dream of Joseph, which declares his destiny as a ruler and at the same time contains astronomical-astrological allusions, deserves to be carefully studied:

9 נַיַּחַלם עוד חַלום אַחַר נַיְסַפֵּר אֹתו לְאָחָיו נַיּאֹמֶר הַנֵּה חָלַמְתִּי חַלום עוד וְהַנֵּה הֹשֶׁמֶשׁ וְהַיָּרַח וְאַחַד עֲשָׂר כּוֹכָבִים מִשְׁתַּחַוִים לִי:

Now he had still another dream, and related it to his brothers, and said, "Lo, I have had still another dream; and behold, the sun and the moon and eleven stars were bowing down to me."

10 וַיְסַפֵּר אֶל־אָבִיו וָאֶל־אֶחָיו וַיִּגְעַר־בּּו אָבִיו וַיּאֹמֶר לוֹ מָה הַחַלוֹם הַזֶּה אֲשֶׁר חַלְמְתָּ הַבוא גַבוא אַנִי וָאִמְד וְאַקִיד לְהֹשְׁתַּחוֹת לְד אָרְצָה:

He related it to his father and to his brothers; and his father rebuked him and said to him, "What is this dream that you have had? Shall I and your mother and your brothers actually come to bow ourselves down before you to the ground?"

11 וַיְקַנָאוּ־בֹו אֶחָיו וְאָבִיו שָׁמַר אֶת־הַדְּבָר: 11

His brothers were jealous of him, but his father kept the saying in mind. (Genesis 37:9-11, NASB)

These verses contain astrological ideas that are still valid in modern astrology, namely, that the Sun signifies the father and the Moon, the mother. The twelve stars, of which eleven bow down to the twelfth, could signify the twelve signs of the zodiac⁶⁷⁴, or possibly also the twelve months. But which is the sign or the month that they all bow down to? It can only be Virgo, or the month of Tishri marking the beginning of the year, or the "head of the year" (*rosh ha-shanah*). On the Jewish New Year's day the Sun is in Virgo and the Moon is at her feet. Thus Joseph's dream describes the same circumstances as the picture of the Woman of the Apocalypse. Now, if the star that leads Joseph is added to this picture (Psalm 80; quoted on pp. 277f.), then again, one arrives at the motif of the rising morning star on New Year's Day.

Elizabeth and Mary

Luke has given clues of a calendric nature that roughly point to the date of Jesus' birth. He writes that John the Baptist began to preach and to baptise in the Jordan River in the 15th year of the reign of the emperor Tiberius (Luke 3:1 ff.). Jesus also came to John to be baptised, and at this time was about 30 years old (Luke 3:21ff.). As Tiberius' 15th year falls into the years 28 and 29 CE, Jesus must have been born *between 3 and 2 BCE*.

However, Luke gives an additional clue: John was about six months older than Jesus, and the time of John's birth can also be derived from statements in Luke. John's father was a priest named Zachariah. Zachariah and his wife Elizabeth did not have a child for a long time because Elizabeth was barren. In those days, there were 24 divisions of priests who had to serve in the temple,

⁶⁷⁴ Martin, The Star that Astonished the World, p. 40.

in cycles. Zachariah belonged to the 8th division, the "division of Abijah". Now when Zachariah was serving in the temple "in his division's turn", an angel appeared to him and told him that his wife would become pregnant. When Elizabeth had been pregnant for five months, the same angel appeared to Mary and told her that she would become pregnant with the "son of the Most High" (Luke 1). Therefore, if one could determine at which point in time Zachariah or the "division of Abijah" had to serve in the temple, one could pinpoint when, at the earliest, Elizabeth had become pregnant. In the sixth month after that Mary would have become pregnant, and a further nine months later Jesus would have been born, thus possibly 15 months after Zachariah's vision. From this information, an approximate birth date could be ascertained.

Unfortunately there is confusion about how exactly the 24-division cycles worked. According to Martin and Papke they took weekly turns, and each division would have had a turn twice a year. The cycles would have been broken during the great annual feasts when all 24 divisions were serving simultaneously. The first division would have taken their turn at the beginning of the Jewish liturgical year, which started in the month of Nisan. The division of Abijah was the eighth one. Because the cycle would have been broken in the middle of Nisan during the week of Passover, the angel would have appeared to Zachariah in the ninth week of the year.⁶⁷⁵

Now the question is which date in the Gregorian calendar corresponds to the 1st of Nisan? As the beginning of Nisan always coincides with a new moon close to the spring equinox, it falls on a date in March or early April. It follows that the division of Abijah could have served in May and November. And the possible months for Jesus' birth are either August/September or January/February, depending on how soon after the appearance of the angel both women became pregnant. The first of the two dates (August/September) corresponds to the birth date of Jesus that has been found in the present work.

However, several points in this explanation are mere speculation. As mentioned already, the exact details of the 24-division cycle have not been handed down to us. In an investigation of the Qumran calendar, Lefgren and Pratt propose a solution which is much simpler and probably also more logical.⁶⁷⁶ This calendar, which was based on a 364-day year (364 days = 52 weeks) with an intercalary week added every 7th year,⁶⁷⁷ noted the divi-

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⁶⁷⁵ Papke, *Das Zeichen des Messias*, pp. 106ff.; E. Martin, *The Star that Astonished the World*, pp. 77f. However, Martin dates the births of John the Baptist and Jesus one year earlier. For this kind of calculation, Martin refers to: van Goudoever, *Biblical Calendars*, p. 274.

⁶⁷⁶ Lefgren/Pratt, *Dead Sea Scrolls May Solve Mystery*, http://www.johnpratt.com/ items/docs/lds/meridian/2003/qumran.html

⁶⁷⁷ However, the intercalation is debated. Vide Beckwith, "Cautionary Notes on the Use of Calendars and Astronomy to Determine the Chronology of the Passion", in: Vardaman/Yamauchi, *Chronos, Kairos, Christos*, pp. 183-205.
sion on duty for all dates. The divisions took over from each other weekly, on midday of Saturday, and without leaving out the great feasts. On the basis of lunar phases mentioned in Qumran scrolls and dated in the Qumran calendar, the authors drew the conclusion that the week which began on Saturday, 23 March 42 BCE, was the week of the 22nd division of Gamul. From other Jewish sources it is known that the Romans destroyed the Temple of Jerusalem on Sunday, 5 August 70 CE, in the week of the 1st division of Jehojarib. This statement is consistent with Lefgren's and Pratt's above-mentioned conclusions.

Let us get back to the account of Luke and find out if his statements together with Lefgren's and Pratt's theory about the cycle of the 24 divisions support the birth of Jesus on 1 September 2 BCE. Zachariah was of the 8th division. Hence, he returned to Elizabeth in the 9th week after the beginning of the cycle. The cycle restarts every 24 weeks. As Jesus must have been born in the year 3 or 2 BCE, one has to repeatedly subtract 24 weeks from Saturday, 4 August 70 CE, until one arrives in 3 BCE. In order to find the week when Zachariah returned from the temple, another 8 weeks are added. It turns out that Zachariah must have returned to Elizabeth on 13 July 3 BCE.⁶⁷⁸ "After these days" ... "when the days of his priestly service were ended" ... "Elizabeth his wife became pregnant" (Luke 1:23-24).

When the angel appeared to Mary and the conception took place, Elizabeth had been pregnant for 5 months plus an unknown number of additional days, possibly for 5½ lunar months of 29.5 days or 162 days. The duration of pregnancy is usually calculated from the last menstrual period and conception takes place 14 days after that. In order to find the day when Mary conceived Jesus, one has to subtract 14 days from 13 July and then add 162 days. The resulting date is 8 December 3 BCE.⁶⁷⁹ If one adds 267 days for an average gestation period⁶⁸⁰, one arrives at 1 September 2 BCE.⁶⁸¹ This is only an approximate date, but it perfectly fits the birth date of Jesus that has been found.

If Jesus was born on that date, then his conception must have occurred around 8 December 3 BCE. It is interesting that the tradition celebrates the

 $^{^{678}}$ 4 August 70 CE = JD 1746840.5. Subtract 157 cycles of 24 weeks, and after that add 8 weeks: 1746840.5 - 157 x 24 x 7 + 8 x 7 = 1720520.5 = 13 July 3 BCE.

 $^{^{679}}$ 1720520.5 - 14 + 162 = 1720668.5 = 8 December 3 BCE.

⁶⁸⁰ "...the days were completed for her to give birth. And she gave birth..." (Lk 2:6-7)

The duration of a human pregnancy cannot be given exactly. It may depend on ethnic, cultural, or social background, age, way of life etc. A gestation period of 266 - 273 days is often used today. 9 synodic months correspond to 266 days. The ancient author Vettius Valens assumed an average duration of 273 days (*Anthology* 1.21), which corresponds to exactly 10 sidereal lunar months or 9 solar calendar months.

 $^{^{681}}$ 1720668.5 + 267 = 1720935.5 = 1 September 2BCE.

conception of *Mary* precisely on this calendar date. Moreover, just after this date in 3 BCE Venus appeared as the evening star for the first time, and on 9 December there was a new moon.⁶⁸² Accordingly, it seems that both the conception and the birth were dated on a new moon and also on the dates of the appearance of Venus as evening and morning star. In the evening of that 9 December Venus was visible on the western horizon together with the crescent moon, and, as has been mentioned, this configuration is symbolically linked to a royal rule. As Mary receives the message about her conception from the Angel Gabriel, and as angels can stand for stars, the idea is compelling that Gabriel was astrologically identified with the evening star.

In fact this is almost inevitable because a pregnancy takes almost precisely nine lunar months and, at the same time, also approximately as many days as there are between Venus' evening first and her morning first appearances. In spite of that, this is a remarkable discovery. The cycles of the Moon and of Venus "harmonise" with the period of a human pregnancy. Because the conception and birth of Jesus harmonise so well with the courses of the Moon and of Venus, the birth of Jesus can be considered the astrological *archetype* of a human being's birth.

The conception of Jesus on a new moon and evening first appearance of Venus also nicely fits the depiction "Annunciation at the Well" mentioned earlier on the Mary's silk of the Abegg Foundation in Bern (p. 346). It is a printed silk cloth from an Egyptian grave from the 4th century CE. The star is below the lunar crescent. This is a very plausible representation of the first or last visibility of Venus before or after the astronomical new moon because it is only near these two dates when Venus is below the crescent, whereas on other dates she is above the first or last crescent. But as discussed, this is not the natal configuration of Jesus because the morning heliacal Venus in the east cannot be seen together with the evening new moon in the west. However, four days before the birth on 28 August Venus could have been observed together with the old moon crescent in the morning sky.

⁶⁸² In the Jewish calendar, this was the 1st of Tebet.

John the Baptist and Jesus

Luke's account of the conceptions of John and Jesus contains further evidence in support of this work's thesis. The imminent pregnancy of both women is announced by the angel Gabriel, and in both cases the impregnation happens in a supernatural way. Mary becomes pregnant as a virgin, thus without an intimate encounter with a man. Elizabeth is an older woman who is long past her menopause and apparently barren. Does Luke want to say that John, too, was not begotten by his earthly father but by the Holy Spirit? Tradition does not say so, but the text allows for this interpretation.⁶⁸³ However, more

There is talk of five months for the obvious reason that in the sixth month the Angel Gabriel appears to Mary and Mary visits Elizabeth. The reason for Elizabeth "keeping herself in seclusion" is uncertain. However, perhaps the old woman is ashamed of her pregnancy, which might even be out of wedlock. Her statement could perhaps be paraphrased as follows: "So, this is what the Lord did to me when he visited me!" Thus, is "the Lord" the father of the child?

2. Luke 1:34-38: Mary asks Gabriel how she could become pregnant without being together with a man:

Πῶς ἔσται τοῦτο, ἐπεὶ ἄνδρα οὐ γινώσκω; καὶ ἀποκριθεὶς ὁ ἄγγελος εἶπεν αὐτῆ· Πνεῦμα ἅγιον ἐπελεύσεται ἐπὶ σέ, καὶ δύναμις Ύψίστου ἐπισκιάσει σοι... καὶ ἰδοὺ Ἐλισάβετ ἡ συγγενίς σου καὶ αὐτὴ συνείληφεν υἰὸν ἐν γήρει αὐτῆς..., ὅτι οὐκ ἀδυνατήσει παρὰ τοῦ θεοῦ πᾶν ῥῆμα.

Gabriel answers:

"The Holy Spirit will come upon you, and the power of the Most High will overshadow you; ... And behold, even your relative Elizabeth has also conceived a son in her old age; ... For nothing will be impossible with God."

Thus, it is God who makes the impossible possible in both cases.

In this context the nativity story of Mary in the apocryphal Gospel of James may be relevant, especially in the older version of the Bodmer Papyrus. There, it is stated that Joachim and Anne were childless and very sad about it. For this reason Joachim went into the desert for 40 days in order to fast and pray, but he did so without informing Anne about it. Consequently, she believed that he had disappeared and incessantly moaned about being a widow and childless. Then an angel appeared to her and said, "Anne, Anne, the Lord has heard your prayer. *You will conceive and give birth*

⁶⁸³ Luke gives two clues that support this interpretation:

^{1.} Luke 1:24-25:

Μετὰ δὲ ταύτας τὰς ἡμέρας συνέλαβεν Ἐλισάβετ ἡ γυνὴ αὐτοῦ, καὶ περιέκρυβεν ἑαυτὴν μῆνας πέντε, λέγουσα ὅτι οὕτως μοι πεποίηκεν κύριος ἐν ἡμέραις αἶς ἐπεῖδεν ἀφελεῖν ὄνειδός μου ἐν ἀνθρώποις.

[&]quot;After these days Elizabeth his wife became pregnant, and she kept herself in seclusion for five months, saying, 'This is the way the Lord has dealt with me in the days when He looked with favor upon me, to take away my disgrace among men (namely the disgrace to be childless)."" (NASB)

important may be the fact that one of the women is young and at the beginning of her fruitfulness, the other is old and has never been fruitful at all. What could be the meaning of this opposition?

It probably is connected to the mysteries of calendar and farming cycles. It has been found that the birth of Jesus was assumed at the beginning of the Jewish calendar year. But when was John born? Luke's accounts of the conceptions of John and Jesus allow for the calculation of a date. Historical correctness is not the primary concern here—more interesting is the symbolism behind the two births. The date found for the impregnation of Elizabeth was 13 July 3 BCE, and adding 267 days one arrives at 6 April 2 BCE as the birth date of John.

What is the significance of this date? It is exactly on the previous evening that the new moon crescent had appeared. Thus John would have been born on the 1st of Iyyar. The preceding month Nisan or Abib coincided by definition with the ripening of barley and harvest time. However, *the month of Iyyar was the beginning of the dry season when the earth became dry and unfruit-ful: during this time the earth was like an old, unfruitful woman.* As against that, Jesus was born at the beginning of the *fields could begin. At this time the earth was virginal and ready to receive the seed.* If these connections are not merely accidental, they depict the mysteries of the farming year. A similar symbolism of the earth as a goddess who is virginal at the time of ploughing and sowing and an old woman after the harvest is known in European rural traditions. Looked at like this, John signifies the dryness and the heat of summer and the waiting for autumn rains; Jesus, on the other hand, signifies the damp half of the year and the fruitful period of the earth.

Jesus' death at the time of Passover, which is during the harvest of harvest, fits in perfectly. Jesus was born in the fall at the beginning of the wet, fruitful half of the year, and he died at its end in springtime. John, however, was born at the beginning of the dry season, and, if the liturgical year of the Catholic and Orthodox church can be believed, he died on 29 August, thus at the end of the dry season and – within the annual cycle – shortly before Jesus' birth.

Thus, the births and deaths of both Jesus and John must be understood in the context of a liturgical year comparable to the one used in later Christian traditions. Christian feast days are repeated every year in the same season, partly on the same calendar date. Apparently, a Christian "liturgical year" already

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⁽συνλήμψεις καὶ γεννήσεις) ...". And an angel also appeared to Joachim and said: "Joachim, Joachim, the Lord has heard your prayer. Go down from here. Behold, *your* wife Anne has conceived in her womb (ἐν γαστρὶ εἴληφεν)". From this description it follows that Mary was not procreated by a mortal man, but most probably by the angel during her husband's absence, whom she had believed to be dead. A discussion of this passage is found in: Strycker, *La forme la plus ancienne du Protévangile de Jacques*, p. 81, footnote 3.

existed at the time the gospels were written, and the different Christian "mysteries" were being celebrated in an annual cycle, although the Jewish calendar was still used. Of course cultic calendars and this kind of symbolism were not first invented by Christians or Jews. There are historical connections with cultic calendars and the myths of Mesopotamia, Ugarit, and Egypt.

The motif of sowing and harvesting appears many times in the New Testament. And when, during the Last Supper, Jesus offers to his disciples bread and wine as *his* "body" and *his* "blood", he may have been identifying himself with the archaic "spirit of the vegetation". The myth of the dying and resurrecting vegetation god— who was called Tammuz or Dumuzi in Babylonia, Osiris in Egypt, and Baal in Ugarit—was assimilated by the Christian religion.

Even the way John dies fits symbolically. He opposes the wedding of King Herod Antipas to Herodias and is killed on the wish of Herodias and her beautiful daughter. (Matthew 14:3ff. and Mark 6:17ff.) The motif of the wedding and the enticing young woman are reminiscent of the goddess of the earth desiring impregnation by ploughing and rainfall. In the farming cultures in the ancient Near-East it was a well-known motif that the sowing of the fields was associated with a wedding and the death of a young man. The Mesopotamian myths of Inanna and Dumuzi are a well-attested example. Inanna is the furrow that desires to be ploughed by Dumuzi. However, after that she sentences him to death. The same motif appears in the Epic of Gilgamesh, where the goddess Ishtar condemns her lover to death. The same theme is also found in the myth of Baal and Anat in Ugarit, and in the Egyptian myth of Isis and Osiris. The husband of the goddess has to die. In the ancient annual farming cycle one should not underestimate this association of working the fields, a wedding and a death.⁶⁸⁴ It is very probable that there is a deeper significance in John-who can be associated with the drought of summer—gets involved in a conflict about a wedding and has to die because of it. John, representing the summer drought, has to die so that the virginal earth can be impregnated from the heavens.

Perhaps the opposition of the two parts of the year represented by John and Jesus are shown in the following words spoken by Jesus in Matthew:

ἦλθεν γὰρ Ἰωάννης μήτε ἐσθίων μήτε πίνων, καὶ λέγουσιν· Δαιμόνιον ἔχει· ἦλθεν ὁ υἰὸς τοῦ ἀνθρώπου ἐσθίων καὶ πίνων, καὶ λέγουσιν· Ἰδοὺ ἄνθρωπος φάγος καὶ οἰνοπότης, τελωνῶν φίλος καὶ ἁμαρτωλῶν...

For John came neither eating nor drinking, and they say, "He has a demon!" The Son of Man came eating and drinking, and they say, "Behold, a gluttonous man and a drunkard ..." (Matthew 11:18-19; cf. Luke 7:33-34; NASB)

⁶⁸⁴ This motif is treated in detail in this author's book *Der Stierkampf des Gilgamesch* (*"The Bull fight of Gilgamesh*", in German).

Although during the summer months there is usually more fresh food available than in the winter months, one can assert that in summer the earth neither "drinks" or "eats" because it does not rain and nothing is sown. During autumn and winter, however, the earth both "eats" and "drinks" because rain is falling and seed is sown.

The Biblical statement that John goes before Jesus and "announces" him can also be seen to relate to this theme, as can the statement of John's:

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έκεῖνον δεῖ αὐξάνειν, ἐμὲ δὲ ἐλαττοῦσθαι.
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He has to increase and I have to decrease. (John 3:30)

For do both parts of the year not increase and decrease at each other's expense? These conclusions are further supported by the fact that the tradition celebrates the birth of Jesus on the winter solstice (on 25 December, according to the old calendar) and the birth of John on the summer solstice (the Feast of Saint John on 24 June).

Of course John's statement could also be referring to the winter solstice and perhaps would fit it even better because this is exactly the day when the Sun's light begins to increase. Also, it is reminiscent of the astronomical-astrological calendar of Antiochus of Athens (2nd cent.), who notes on 25 December:

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Ήλίου γενέθλιον · αὔξει φῶς.
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Birthday of the Sun. The light increases.⁶⁸⁵

There is also another possible connection between John and Jesus. While Venus as morning star represents Jesus, Mercury, the less conspicuous of the two morning stars, could represent John. John's task is to witness to the light that shines in the darkness (John 1:6-8). In reference to 2 Peter 1:19, the light shining in the darkness has been identified with the morning star. In fact, if John's task is witnessing, announcing, and proclaiming, according to the teachings of ancient astrology these clearly are *Mercurial* (i.e. "Hermetic" or "hermeneutic") actions.

According to Job 38:7, at the creation of the world the two morning stars were singing and the other stars – literally "the angels" – praised God. On the 1st Tishri, their New Year's day, Jews remember the creation of the world and the future coming of the rule of their Messiah. Perhaps it is merely coincidental that a few days before the birth of Jesus on the 1st Tishri, Venus made her first appearance in the morning, whereas Mercury made his last morning appearance. However, we could also recognise this occurrence as a repetition of the motif that Jesus had to grow and John had to wane (John 3:30).

It will be shown a little later that the two bright angels that appeared on the morning of the resurrection on 5 April 33 CE at the empty tomb might have been these two morning stars. It seems that they both played an important symbolical role in early Christianity.

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⁶⁸⁵ Boll, Griechische Kalender I, pp. 16 and 40ff.

Summary

The interpretation given for Matthew 2 and Revelation 12 has led this investigation to the conclusion that early Christians assumed that the birth of Jesus fell on the 1st September 2 BCE, which was a Jewish New Year and fell shortly after a heliacal rising of Venus. These conclusions are further supported by other sources.

1. In an early version of the apocryphal Gospel of James (Papyrus Bodmer), the *magi* arrive in Jerusalem and ask questions about the new-born king "whose star" they have seen. Shortly thereafter, however, *several* stars are rising and go ahead of the *magi* and one of these stars finally stands still above Mary and the child. This description very nicely accords with the planetary configuration of the beginning of September 2 BCE. Only a few days after the heliacal rising of Venus, Jupiter and Mars rose heliacally also. However, only Venus made a station shortly after that. Here—other than with Matthew—the "going ahead" of the stars cannot be interpreted as a retrogradation, because only Venus was retrograde immediately after her appearance. Either this is an "inaccuracy" in the text, or its intended meaning of the "going ahead" is that the planets "go before" *the Sun* in the diurnal rotation of the sky.

2. The legend of the *magi* is only found in the Gospel of Matthew; the other evangelists do not seem to know it. However, Luke relates a story of shepherds in the fields to whom a shining angel appears and announces the birth of Jesus. *This* story, again, seems to be unknown to Matthew. It has been shown that angels in the Bible often stand for stars and that Luke's angel can be nothing else but the Star of Bethlehem. The story of the *magi* and the star and the story of the shepherds and the angel are only variations of one and the same motif. Furthermore, it is interesting that *after* the appearance of the angel, *several more angels* appear, all of which rise to the sky. This description, like the one given in the Papyrus Bodmer, can be explained by the fact that shortly after the appearance of Venus, Mars and Jupiter also made their morning first appearance.

3. According to Matthew 1, Jesus is born from a virgin. Now, if the "virgin" and the natal star of Matthew 2 are interpreted *astrologically*, i.e. if they are assumed to indicate that Venus made a heliacal rising in *astrological Virgo*, then again the end of August or beginning of September 2 BCE seems to be the intended date. The only additional information provided in John's vision of the Woman of the Apocalypse is the position of the Moon, which allows a day-accurate dating.

4. The Balaam prophecy of the "star" and the "sceptre" in Numbers 24:17 can also be interpreted in accordance with the interpretation given for the Woman of the Apocalypse. According to Genesis 49:9f., the "sceptre" represents the

front part of Leo with the star Regulus. At the time of the heliacal rising of Venus in the year 2 BCE, this "sceptre" was seen above this planet.

5. In Genesis 37:9-11, Joseph dreams that the Sun, Moon, and eleven stars bow down before him. Joseph's father interprets the dream as indicating that father, mother, and the eleven elder brothers will bow down before him. The importance of the Sun and the Moon for the Hebrew soli-lunar calendar does not need any explanation. The eleven "stars" could represent twelve constellations or single stars that were assigned to the twelve months of the year. The question arises which of the 12 constellations or stars could represent Joseph. The answer might lie in the fact that the year was considered to begin on the 1st of Tishri, the "head of the year" (*rosh ha-shanah*), which ideally showed the new crescent moon in Virgo or near Spica. This is exactly the configuration of the Woman of the Apocalypse. According to John, twelve "stars" stand above here head. These could be interpreted as the twelve zodiac signs.

6. Luke relates that Zechariah, the father of John the Baptist, had a vision during his temple service and was told that his wife Elizabeth would become pregnant. Among the 24 divisions of the priesthood, which took over from one another in a weekly rotation, Zechariah belonged to the eighth division called Abijah. Furthermore, it is known that Mary became pregnant in the sixth month of Elizabeth's pregnancy. From this, an approximate birth date of Jesus can be derived. The date found is in in agreement with 1 September 2 BCE.

7. The birth of Jesus on the 1st of Tishri and the autumnal new moon is exactly complementary to the date of the crucifixion and resurrection because the latter falls on Passover, the 15th of Nisan, and the spring full moon. Since the birth of John is assumed to be about $5\frac{1}{2}$ months before the birth of Jesus, and since the martyr's death of John is celebrated on 29 August, thus just before the birth date of Jesus, it follows that Jesus and John stand for the two halves of the agricultural year: Jesus for the wet and fertile half, John for the dry and barren half. Additionally, not only was the birth date of Jesus was assumed to coincide with the date of John's death, but also the death date of Jesus was believed to coincide with the birth date of John. This symbolism also appears in the fact that John was born from an old barren woman, whereas Jesus was born from a virgin, where the virgin symbolises the virginal earth before sowing, and the old barren woman symbolises the "barren" field after harvest. Moreover, this symbolism appears again when John is criticised for his severe asceticism, while Jesus was criticised for his enjoyment of life (Matth. 11:18f.). Finally, the same symbolism manifests itself in the statement that the one must "decrease" for the other to be able to "increase" (John 3:30). The symbolism of sowing and harvest is ubiquitous in the New Testament. The complementarity of John and Jesus is also preserved in the later liturgical calendar, where the birth of Jesus was celebrated on the winter solstice (on 25 December), and the birth of John on the summer solstice (on 25 December). Furthermore, the church celebrates the Annunciation of Mary, when her pregnancy began, on the spring equinox (on 25 March), whereas the Eastern Church celebrates the conception of John on the autumn equinox (on 23 September).

What does Ancient Astrology Contribute?

Jesus' Astrological Birth Chart

The Magi were astrologers, and the Biblical texts evidently assume that at the moment of Jesus' birth there was a suitable astrological configuration in the heavens. Until now, the present work has not engaged much with the teachings of ancient astrologers which have been handed down to us through a considerable number of writings. Would the birth date found for Jesus have made sense to them astrologically? If yes, that could be seen as further evidence for its correctness. Whether the horoscope really belongs to Jesus or whether early Christians merely ascribed it to him because it made sense is a question that shall be left unanswered. The present investigation is simply concerned with the question of whether a horoscope has been found that accords with the Messiah.

On p. 371 Jesus' astrological birth chart is shown. It was generated on the website of the astrology company Astrodienst, *www. astro.com*. Ancient astrologers would have drawn a birth chart approximately like this. Although the aspect lines shown in it, as well as the symbols used for the signs and planets, are an anachronism, this need not disturb the reader. It is a fact that ancient astrologers were aware of aspects between planets.

The chart shows the zodiac and the positions of the planets within it. The ascendant ("AS") is the degree of the rising zodiac sign on the eastern horizon at the time of the birth, assuming a flat horizon. It is positioned on the left side. The descending zodiac sign on the western horizon on the right side is called the descendant ("DS"). The ascendant is in Leo, and the descendant is in Aquarius. The Medium Coeli ("MC"), or midheaven, is situated above in Taurus, the zodiac sign culminating in the south. Opposite, in the north and under the earth, the Imum Coeli ("IC") is situated, and that is the point on the zodiac which, at that moment in time, is passing through the lowest point of its daily course. Planets at one of these points play a very significant role, especially those that are near the ascendant or midheaven.



Jesus, Monday, 1 September 2 BCE., 4:30 a.m. Bethlehem, 35e12, 31n43

		tropical			sidereal/Valens		house
\odot	Sun	5°28' 5"	mp	Virgo	9°	m	2
\mathbb{D}	Moon	3°41'19"	<u>त</u>	Libra	8°	<u>n</u>	3
ğ	Mercury	3°14'57"	m	Virgo	7°	mp	2
ę	Venus	19° 5'16"r	ର୍	Leo	23°	ର	1
ď	Mars	26° 2' 7"	ର୍	Leo	0 °	m) !	1
4	Jupiter	23°41' 8"	ର୍	Leo	28°	ର	1
ち	Saturn	2°13'38"	Π	Gemini	6°	Π	11
ស	Lunar node	24°22'22"	Ŋo	Caprico	orn 28°	Y₀	6
\oplus	Fortune	23°23'36"	୍ର	Virgo	27°	6)	12
	Ascendant	21°36'51"	ର୍	Leo	26°	ର	
	Medium Coeli	17°23'57"	Я	Taurus	21°	Я	

The twelve astrological houses also play an important part. The first house includes all of the zodiac sign that contains the ascendant. Since in the chart under discussion the ascendant is situated in Leo, the first house includes all of Leo and the planets Venus, Jupiter, and Mars, which are also in Leo. The houses two to twelve are numbered anticlockwise, starting with Virgo, and each of them includes one zodiac sign. Mercury and the Sun, which are in Virgo, are thus situated in the second house, while the Moon in Libra is already in the third house. The planet Saturn has a conspicuous position: located high in the sky in Gemini in the eleventh house, he casts a square aspect (90° angle) on the Sun and Mercury, and a trine (120° angle) to the Moon.

The exact positions of the heavenly bodies, as well as the ascendant and the midheaven, are indicated beneath the diagram. The information, exact to the arc second, refers to the tropical zodiac as Ptolemy (2nd cent.) used it or intended to use it. In the tropical zodiac the beginning of the zodiac sign of Aries is situated, by definition, at the vernal point. However, other astrologers, for instance Ptolemy's contemporary, Vettius Valens, used a so-called sidereal zodiac which was stationary with respect to the fixed stars. Due to the precession of the equinoxes, the two zodiacs slowly drift apart. The difference between the sidereal zodiac of Valens and the tropical zodiac was about 4° in Jesus' time.⁶⁸⁶ It is possible, even probable, that Jewish and Mesopotamian astrologers used the sidereal zodiac. For this reason the table shows not only the tropical planetary positions, but also the approximate positions of the planets in the sidereal zodiac according to Vettius Valens. In this horoscope the choice of zodiac does not make a significant difference: With the sidereal zodiac only Mars would change signs, from Leo to Virgo, and thus move into the second house.

The last column of the table indicates in which house each planet is situated. Based on these considerations, the astrological meaning of this birth chart can be approached.

Methodological considerations

How well does this birth chart apply to Jesus? To begin with, one has to be aware of the danger that the author's or the reader's personal perceptions of Jesus could influence the answer. In order to avoid such personal prejudices in the following observations, attention will be directed, as far as possible, to those somewhat external features of Jesus that are surely recognised by everyone:

 $^{^{686}}$ Valens himself, like most ancient astrologers, believed that it was 8° based on some outdated information he had found in older literature. However, this author has compared Valens' planet positions with modern tropical calculations and arrives at only 4°.

- 1. The Magi considered Jesus to be a new-born king.
- 2. Jesus was a kind of priest.
- 3. He identified himself with the poor and the marginalised.
- 4. He came into conflict with the prevalent religious and state authorities, and he was executed.

The method of interpretation chosen will also play an important part. Astrology is, after all, not a consistent system of teachings. A look at current astrology shows that there are many astrological schools, each using its own methods. There are also enormous differences between countries, and there is little sharing of information across language borders. In addition, it hardly needs to be stated that very few present day astrologers know what methods ancient astrologers used. It is obvious that only these ancient astrological teachings are relevant for the present work's attempt to ascertain whether this horoscope for Jesus would have applied to Jesus in the minds of early Christian astrologers. Unfortunately, it is not precisely known which methods Jewish and Babylonian astrologers used in those days. One has to rely largely on Greco-Egyptian authors who have left us a substantial amount of literature. Fortunately, however, it is very likely that Greco-Egyptian astrologers shared fundamental techniques with their Babylonian and Jewish colleagues. Apart from that, two major differences between Greco-Egyptian and ancient Jewish astrology have appeared in the present investigation:

1. A divergence in interpretation of zodiac signs

Jesus' birth chart is depicted in the Revelation of John in the form of the Woman of the Apocalypse. This picture of a woman is interpreted as the sign of Virgo, but *in a Jewish context*. Virgo is prominent at the beginning of a Jewish civil year, and Jesus' horoscope is a Jewish New Year's horoscope. These associations would not appear in a Greco-Egyptian interpretation of the same birth chart.

2. A divergence in interpretation of planets

In ancient Israel, Venus as the morning star was associated with royal rule and success in war. The associations in Babylon were similar. However, in Israel Venus was not seen as a female goddess, but as a male angel of the Lord. In stark contrast, Venus in Greco-Egyptian astrology became the goddess of love and harmony, and she lost her strong association with royal rule and success in war.

With such fundamental differences, it is clear that an attempt to trace an early Christian view of Jesus' birth chart, using Greco-Egyptian astrology, can only be partly successful. Nevertheless, it is worthwhile to attempt this, because both traditions are certainly related and they do have a number of common features. Matthew reports – according to this author's interpretation – that the star of the Messiah was retrograde at its heliacal rising, and soon afterwards made a station. In Greco-Egyptian astrology these so-called *phases*

of planets were also of great significance. Moreover, not all planets and signs were interpreted differently. In Biblical, as well as in Greco-Egyptian astrology, Leo was associated with royal rule, and the star Regulus on Leo's chest was seen as his "sceptre". Similar ideas are documented in Mesopotamian astrology.⁶⁸⁷ Therefore, it can be expected that in consulting Greco-Egyptian teachings in combination with the knowledge gained about the Jewish and Mesopotamian traditions, the horoscope will begin to speak more clearly.

What do Present-day Astrologers Say about this Birth Chart?

Although the teachings of ancient astrology are different from modern astrology, the present day astrological mainstream shares certain basic concepts with ancient astrology. Thus it may be interesting to know what modern astrologers think of this birth chart.

In 1998 this author published an article in the German astrological journal *merCur* in which he introduced his theory about the star of Bethlehem and the Jesus birth chart to a wider audience. In 2008 a revised version of the same article was published in the journal *Meridian*.⁶⁸⁸ The author barely went into the details of the horoscope, instead restricting himself to the factors that were immediately apparent and that were significant not just to present day astrologers, but would also have attracted the attention of ancient astrologers.

The significant stellium of planets in Leo, king of the animals, and the fact that this grouping is near the ascendant is striking. It particularly fits a person who considers himself to be a king and who acts like one. Jupiter is the planet of kings and leaders; Venus is the planet of love and harmony; and Mars is the planet of passion and war. The three in combination with Leo in the ascendant indicate a charismatic leader and passionate teacher of love. Jesus' absolute claims that no one could reach God except through him, and that he alone was "the way, the truth and the life" are appropriate expressions of the massing of heavenly bodies in Leo. The planet of law, Saturn, in square with the Sun and Mercury, symbolises the rift between Jesus and the orthodox Jews and the Roman government. What may be missing in this horoscope from a modern astrological point of view is a strong indication of Jesus' religious ambitions.

Thus, the birth chart roughly fits, although one has to concede that this is not the first apparently "suitable" Jesus horoscope. Michael Molnar's theory

⁶⁸⁷ cf. Genesis 49:9-10 with the Cuneiform text MUL.APIN I i 9.

⁶⁸⁸ Koch, "Der Weihnachtsstern", in: *merCur* No. 6, Nov./Dec. 1998, p. 30ff.; Koch, "Der Stern von Bethlehem", in: *Meridian* No. 6, Nov./Dec. 2008, p. 42ff.; "Jesu Todes und Auferstehungsdatum", in: *Meridian* No. 2, May/June 2009.

could serve as another example, not to mention the countless attempts by astrologers who come to different conclusions.

The responses received from readers were mainly positive and this author's reasoning received a great deal of acclaim. However, the birth chart did not produce a wave of excitement. It seems that one of the reasons for this restrained reaction was that the picture of Jesus held by many astrologers was (and of course still is) shaped by theosophical, anthroposophical and other schools of thought in modern spirituality. This is exemplified by the reaction of the German astrologer G. Briemle, who rejected the chart in a scathing letter to the journal. This author believes that it is precisely in this strong rejection of his thesis that it becomes apparent how suitable the horoscope really is⁶⁸⁹. Briemle writes:

This birth chart with its emphasis on the first house one could give the name: "Hey, here I come!" It is the chart of an extremely egocentric person who is attached to material things, even in the distribution of elements: 42 percent fire, 37 percent earth, 14 percent air and 7 percent water (including both sign and house positions). ... From an *astrological* point of view ... this birth chart is probably the most amateurish I have ever come across.

In Briemle's view, the element water should predominate, as Jesus allegedly had been very quiet, taciturn and reclusive, and the epitome of altruism. His picture of Jesus, as it emerges, is shaped very strongly by the 19th century "New Revelations" of Jakob Lorber. However, looking into the oldest Gospel, the one written by Mark, one finds a much more "fiery" and "earthy" picture of Jesus. The combination of fire and earth is, after all, a beautiful symbol for the incarnation of the Divine Spirit, and part of Briemle's criticism appears as a confirmation of the data worked out by this author. In a certain sense Jesus was, after all, "egocentric": "No-one comes to the Father but through me."

⁶⁸⁹ Reader's letter Gottfried Briemle in merCur Nr. 4, July/August 2001, p. 4f.:

[&]quot;Dieses Horoskop mit seiner Ersten-Haus-Betonung könnte man... mit einem egozentrischen "Hoppla, jetzt komm' ich!" betiteln. Allein schon nach der Elemente-Verteilung handelte es sich dabei um einen überaus ich-bezogenen, ganz und gar dem Materiellen verhafteten Menschen mit 42 Prozent Feuer, 37 Prozent Erde, 14 Prozent Luft und sieben Prozent Wasser (Zeichen- und Hausstände zusammengenommen). ... Aus *astrologischer* Sicht ... ist dieses Radix so ziemlich das Laienhafteste, was mir bisher begegnet ist."

What Does Ancient Astrology Say?

In the last chapter a very rough interpretation of Jesus' birth chart was given that would have been compatible with both ancient and modern astrologers' teachings. In what follows, further details will be given about interpreting this chart using ancient methods. From this, an even clearer picture will hopefully be arrived at that will make it possible to decide whether, in view of ancient teachings, this chart would have been worthy of the person of Jesus. As has been stated, however, this investigation will have to rely heavily on sources of Greco-Egyptian astrology because comparable Jewish or Mesopotamian sources did not exist or are not extant.

In Jesus' birth chart Venus is heliacally rising in Leo near the eastern horizon and in conjunction with Jupiter and Mars. Planets which are conjunct the ascendant or midheaven, were seen as strongly positioned. In the present horoscope this applies to Venus, Jupiter, and Mars. The three planets are in Leo, and Leo symbolises, inter alia, royal rule. Jupiter, too, may be associated with royal rule. And certainly in the Jewish-Babylonian tradition Venus-Ishtar played an important part as a maker of kings. Here Venus even surpasses Jupiter-Marduk in significance. Interestingly, the lion was the mount of the Venus goddess Ishtar. In Babylonian prayers Ishtar herself is addressed occasionally as a "lion",⁶⁹⁰ and Ishtar in Leo clearly indicates a kind of strengthened position for Venus, comparable to the domicile or exaltation in Greco-Egyptian astrology. Unfortunately, it is unknown in which sign the Babylonian Venus had her exaltation (*bīt niṣirti* = ὕψωμα). It could well have been Leo.⁶⁹¹

Not only is Venus in the ascendant, but Jupiter and Mars are as well. These three planets together must play a very important role in the character and life of this person, but what kind of role? Vettius Valens writes about this triple combination (τριῶν ἀστέρων συγκρᾶσις):

Ζεὺς Ἄρης Ἀφροδίτη πολυφίλους μὲν καὶ φιλοσυνήθεις ἀποτελούσιν, συστάσεών τε μειζόνων καὶ ἀφελειῶν καταχιουμένους, ἐν προκοπαῖς γινομένους, ὑπὸ γυναικῶν προβιβαζομένους· τινὰς μὲν οὖν ἀρχιερατικούς, στεφανηφόρους, ἀθλητικοὺς ἢ ἱερῶν προεστῶτας <ἢ> ὅχλων, ἡδοναῖς ἐξυπηρετουμένους καὶ κατὰ καιρὸν ἀστάτως καὶ ἀνωμάλως διάγοντας, ἐπιψόγους δὲ καὶ ἀδιαφόρους περὶ τὰς συνελεὺσεις, δειγματισμοῦς προδοσίας ὑπομένοντας, εἴς τε τὸν περὶ τέκνων καὶ σωμάτων τόπον λυπουμένους, καινοτέραις ἑπιπλοκαῖς ἡδομένους, χωρισμοὺς τε γυναικῶν ὑπομένοντας.

⁶⁹⁰ In a prayer to Ishtar, it says:

irninītu labbu nadru libbaki linūha "Irnini (Ishtar), raging lion, may your heart calm towards me." (Zgoll, *Die Kunst des Betens*, p. 44. Translation D.K.)

⁶⁹¹ Hunger/Pingree, Astral Sciences in Mesopotamia, p. 28.

Jupiter, Mars, and Venus bring about [people] that have many friends and love to interact with others; people that are considered worthwhile [to enter into] closer relationship with and to grant benefits to; those who are advanced, who are supported by women; *some also who have the office of a high priest; who wear wreaths,* be it wreaths of athletes or *[wreaths] of those who conduct the holy [celebrations or sacrifices], or [wreaths which] are [bestowed] by crowds of people*; people who pursue entertainments and who spend their time according to opportunities unsettled and unseemly; *those who have to suffer public exposition and betrayal*; those who are grieved relative to the astrological house of children and bondsmen⁶⁹², who enjoy new (sexual) relationships and who have to suffer separation from women.⁶⁹³

This author thinks that the parts put in italics fit Jesus extremely well: His role as high priest needs no explanation; the wreath is reminiscent of the crown of thorns he was wearing on the cross; and when promiscuity is mentioned, it reminds one of the fact that Jesus was accused of associating with harlots and tax collectors (Matthew 21:32). Other points mentioned in this description could apply to Jesus too, but there is no need to go into that here.

That Venus preceded the Sun in the course of the day was an important fact for Greco-Egyptian astrologers. Planets preceding the Sun were regarded as "spear-bearers" (δορυφόροι).⁶⁹⁴ The metaphor of spear-bearers originates in the Persian royal court. Wherever the king stayed and wherever he went, he was always accompanied by guards carrying spears. They protected him and they were also a sign of his royal dignity. In ancient astrology the Sun or the Moon can be "king", and they can have spear-bearers at their command. Spear-bearers are used to give an indication of the social status of the person whose birth chart it is, but the precise definition of "spear-bearer" varies from one author to another: According to Paulus Alexandrinus, a planet may be no more than 120° from the Sun in order to be regarded as a spear-bearer.⁶⁹⁵ For outer planets this is the approximate position where they become stationary and retrograde. If this astrological idea is applied to the Jesus birth chart under discussion, it turns out that not only Venus, but all planets were spear bearers of the Sun, the only exception being the Moon. In other words, the Sun enjoys the highest royal honour in this horoscope.

Spear-bearers that are in the phase of visibility and can be observed before sunrise on the day of the birth are also considered to be particularly "active":

⁶⁹² The fifth or eleventh place (= house), according to Valens, *Anthologia*, IV,12,1; in the Greek edition of Pingree p. 170.

⁶⁹³ Vettius Valens, Anthologia, I,20,19; in the Greek edition of Pingree p. 45, l. 6ff.

⁶⁹⁴ Paul of Alexandria, *Eisagogika*, 14; in Schmidt's translation, p. 26f. For all the following information on spear bearers, this author refers to: Denningmann, *Die astrologische Lehre der Doryphorie*.

⁶⁹⁵ Paul of Alexandria, *Eisagogika*, 14.

such people can assert themselves in life, and these planets' characteristics are their strengths. At the same time, Paulus Alexandrinus assumes that a planet must be at least 15° away from the Sun in order to be seen or, more precisely, "rising in the morning" (ἑῷοι ἀνατολικοί). In the birth chart of Jesus this condition is fulfilled for Venus and Saturn. Jupiter is only 12° distant from the Sun. However, the ancient astrologers' ephemeris calculation was so imprecise that it could possibly have reached 15° and thus also have been counted as "visible". The fact that Jupiter could definitely have been observed under favourable atmospheric conditions on this day is not important here, because, like modern astrology, ancient astrology was based on ephemerides rather than direct observation of the sky.

Thus, according to Paulus Alexandrinus, a planet has its heliacal rising at the point when it has reached a distance of 15° from the Sun. Venus is 16° distant from the Sun. Therefore, it would have been regarded as "heliacally rising". The fact that it could have been visible for several days before that, if conditions had been favourable, is irrelevant here, too.

As far as Jupiter is concerned, it does not quite fulfil this condition, as has been stated. However, in this regard the astrologer Antigonus of Nicaea, who interpreted the birth chart of the emperor Hadrian, makes an interesting statement. He asserts that seven days after the birth of Hadrian, Jupiter was to make his heliacal rising, and in this he sees a reason why Hadrian became emperor.⁶⁹⁶ This same argument can also be applied to the birth chart of Jesus, especially since in his case it was not a matter of seven, but of only four days. This circumstance would also have been of importance to Babylonian astrologers because, besides from Venus, Jupiter was also associated with royal rule. The pending heliacal rising of Mars, however, probably would have been ignored. It would have occurred about 15 days later, according to the 15° rule.

There is an interesting detail in Paulus Alexandrinus: He describes the period from the heliacal rising of a planet at an elongation of 15° until its first station as the path from "youth" or "newness" ($v\epsilon \delta \tau \eta \varsigma$) to "completion" or "perfection" ($\dot{\alpha}\pi \sigma t \epsilon \lambda \epsilon \sigma \mu \alpha$). Unfortunately he does not give an explanation of this pair of terms, but it is plausible that $v\epsilon \delta \tau \eta \varsigma$ could also mean "birth" here. Thus, as Venus and Jupiter represent the king, the two planets in heliacal phase could have indicated the "birth of the king".

As stated, all planets are spear-bearers of the Sun in this horoscope because they precede the Sun during the course of the day. Not only that, they are also all auspiciously positioned:

- 1. Saturn and Jupiter are considered members of the "sect" (α íρεσις) of the Sun.
- 2. Both are located in male signs: Jupiter in Leo, Saturn in Gemini.

⁶⁹⁶ Denningmann, Die astrologische Lehre der Doryphorie, p. 333ff.

- 3. Both are in the triangle (= element) assigned to them: Jupiter in fire, Saturn in air.
- 4. Both are in their visible phase or just before it (Jupiter).
- 5. Both are in propitious houses: Jupiter is even in the ascendant house. Although Saturn is a "malefic" (κακοποιῶν), he is located in the very positive eleventh house, the house of the "good demon". According to Vettius Valens, under this circumstance Saturn would not manifest his negative qualities. It is not clear whether this applies even if he casts an inauspicious square aspect (90° angle) to the Sun and Mercury, as he does in this case. But such a hard aspect could serve very well as an explanation for Jesus' execution.

Basically, both Jupiter and Saturn are located particularly auspiciously as spear-bearers, while Saturn's inclination to harm is somewhat diminished.

What is the situation with the members of the "sect" of the Moon, i.e. Venus and Mars? As has been stated already, Venus has a particularly strong and positive position because of her recent heliacal rising, and since this is a night birth, the horoscope is subject to the Moon (and not the Sun). The Moon is in Libra, her "host" ($0i\kappa 0\delta \epsilon \kappa \tau \omega \rho$), and therefore her ruler is Venus.

Mars, like Saturn, is fundamentally a "malefic", but because of his propinquity to Jupiter and Venus his negative influence is diminished. In addition, Mars cannot have its full negative effect because he is not visible. One wonders whether he "loves his enemies".

Mercury belongs to the "sect" of the Sun because he precedes the Sun in his daily course. He is located in his feminine domicile, Virgo, and is therefore "host" to the Sun, which makes him a very valuable spear-bearer.

The position of the Sun is ambivalent. On the one hand, he is located in the unfavourable second house, the "gate to the underworld", which tends towards ruin and destruction. In addition, it is a problem that the "malefic" Saturn casts a square aspect on him. However, as has been stated, the influence of Saturn is moderated. Besides, the Sun as the ruler of Leo is also ruler of the ascendant. Moreover, the Sun is supported and protected by mighty spearbearers, in particular Mercury who is the Sun's "host" in Virgo. So, in spite of these difficulties, the Sun holds a very powerful position. Now, the question arises: What will be stronger, the auspicious or the inauspicious tendency?

What can be said about the Moon? Although she has no spear-bearers because Venus, Mars, and Mercury have, so to say, "defected" to the Sun, nevertheless she is located in the third house where she "rejoices" ($\chi \alpha i \rho \epsilon i$), because this is the house of the moon goddess. In this house, depending on the positions of the other planets, the Moon can indicate royal or priestly dignity if the rest of the configuration does not oppose it. As she is in Libra, Venus is her host, who has a very powerful position in this horoscope.

Apart from that, this horoscope has a crescent moon that has just emerged prior to the autumn equinox. According to Ptolemy a first crescent close to a solstice or an equinox is of significance. Unfortunately he does not elaborate on how he applies this to a birth chart. With regard to this matter, nothing concrete can be gleaned from other authors either. Firmicus Maternus says, concerning the phases of the Moon, that the waxing moon represents growth, and the waning moon diminution. According to Vettius Valens, the first crescent, together with its ruler, provides information about a person's livelihood and the success of businesses.⁶⁹⁷ In Jesus' birth chart the prospects are favourable because the Moon and her ruler, Venus, are favourably placed. Incidentally, the first evening appearance ($\dot{\alpha}\nu\alpha\tauo\lambda\dot{\eta}$) of the Moon would have been very favourable and auspicious.

In terms of ancient astrology, one can come to the conclusion that the owner of this chart would have a very powerful personality.

Only the square aspect between Saturn and the Sun casts a shadow on this chart. Saturn, who is considered to be a "malefic", casts a "square beam" on the Sun and Mercury. This means that his position is at a 90° angle to them which is also considered to be an ominous sign. It is therefore interesting what Vettius Valens writes about combinations of Saturn with the Sun and with Mercury. Although he does not differentiate according to aspects, it is obvious that the 90° aspect, because it is adverse, would have intensified the negative effects that Valens mentions for these combinations of planets. About Saturn and Mercury, he writes:

Κρόνος μὲν οὖν καὶ Ἐρμῆς σύμφωνοι καὶ πρακτικοί· πλὴν διαβολὰς ἐπάγουσιν ἕνεκεν μυστικῶν, κρίσεις καὶ χρεωστίας, γραπτῶν τε καὶ ἀργυρικῶν χάριν ταραχάς, οὐκ ἀπόρους δὲ οὐδὲ ἀσυνέτους, πολυπείρους καὶ πολυίστορας ἢ προγνωστικοὺς φιλομαθεῖς, περιέργους, ἀποκρύφων μύστας, εὐσεβοῦντας εἰς το θεῖον, δυσσυνειδήτους.

Saturn and Mercury are in accord and active, but they cause defamation because of the occult (ἕνεκεν μυστικῶν)⁶⁹⁸, legal disputes and disputes about debts, problems related to contracts or money. However, they do not [create] helpless or ignorant [people], but [rather] those with a lot of experience, a lot of knowledge or foreknowledge, those who enjoy learning, curious ones, initiates of occult practices (ἀποκρύφων μύστας), who honour the divine, those who have a bad conscience.⁶⁹⁹

No doubt, this suits Jesus fairly well; after all, he was brought before the court because of his religious teaching. The expression "initiates of occult

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⁶⁹⁷ Vettius Valens, Anthologia, II,36,6f.; in Greek edition of Pingree p. 102, l. 3ff.

⁶⁹⁸ Robert Schmidt translates this as "private matters". However, further on it is mentioned that people with this configuration are "initiates of occult practices" or of mysteries (ἀποκρύφων μύστας).

⁶⁹⁹ Vettius Valens, Anthologia, I,19,4; in the Greek edition of Pingree p. 37, l. 1ff.

practices" apparently refers to the mystery religions, i.e. cults where secret teachings played an important role. Christianity took over numerous elements of such religions, e.g., from the Mithras cult, the Isis and Osiris cult, the Adonis cult and other religions, as has been shown already.

Valens' passage about Saturn and the Sun reads as follows:

Κρόνος μὲν οὖν καὶ "Ήλιος ἀσύμφωνοι, μετὰ φθόνων τὰς κτήσεις καὶ τὰς φιλίας παρεχόμενοι καὶ ἀφαιρούμενοι· ὅθεν <οἰ> ὑπὸ τὴν τοιαύτην στάσιν γεννηθέντες ἔχθρας λαθραίας πρὸς μείζονα πρόσωπα <καὶ> ἀπειλὰς ὑπομένοντες καὶ ὑπό τινων ἐπιβουλεύονται καὶ ἐπιφθόνως μέχρι τέλους τὸν βίον διάζουσιν. ὑποκριτικῶς δὲ φερόμενοι τῶν πλεῖστων περιγίνονται, πλὴν οὑκ ἄποροι (εὕποροι ?) καθίστανται, ἐπιτάραχοι δὲ καὶ ἀνεξίκακοι, ἐγκρατεῖς περὶ τὰς τῶν αἰτίων ἐπιφοράς.

Saturn and the Sun are not in accord with one another. With jealousy they grant and withdraw possessions and friendships. For this reason, [people] who were born under these conditions are exposed to secret enmity from highly placed persons and threats [from them] and are persecuted by some and will live their life with jealousy to their end. And when one hypocritically mocks them, they usually outclass one, but they do not have a proper position: instead they have problems and have to bear evil, but in this they retain authority when they are attacked by their enemies.⁷⁰⁰

These statements can well be applied to Jesus' difficult relationship with religious and public authorities. The religious authorities accused him of blasphemy, while he was in conflict with the public authorities because he saw himself as the Messiah and thus as king of the Jews.

⁷⁰⁰ Vettius Valens, *Anthologia*, I,19,8; in the Greek edition of Pingree p. 37, l. 19ff. This author follows Radermacher, who reads εὕποροι instead of ἄποροι. For this reason, the translation given here diverges from that of Robert Schmidt's.

Births of Kings according to Vettius Valens

Vettius Valens writes the following about the birth of kings:

έὰν ὁ Ἡλιος καὶ ἡ Σελήνη ἐν χρηματιστικοῖς ζῷδίοις ὄντες δορυφορηθῶσιν ὑπὸ τῶν πλείστων ἀνατολικῶν, μηδενὸς τῶν κακοποιῶν ἐναντιουμένου, εὐτυχεῖς καὶ ἐνδόξους, ἡγεμονικὰς καὶ βασιλικὰς τὰς γενέσεις ποιοῦσιν· ὁμοίως δὲ καὶ ἐὰν οἱ κύριοι τούτων ὡροσκοποῦντες <ἣ> ἐπίκεντροι τύχωσιν.

When the Sun and the Moon are in effective signs⁷⁰¹ (that is, in signs that are on the ascendant or midheaven, D.K.), and most [planets] accompany them as their spear-bearers and as morning risers ($\dot{\alpha}\nu\alpha\tau\sigma\lambda\nu\kappa\tilde{\omega}\nu$), and if no malefic (that is, either Mars or Saturn, D.K.) opposes them, then they will make the nativities happy and famous, ruling and royal. Likewise, if the rulers of their signs (that is, the Sun's or Moon's signs, D.K.) are located at a cardinal point (that is, conjunct the ascendant or midheaven, D.K.).⁷⁰²

Does this text accord with the birth chart of Jesus? The condition of having spear-bearers is fulfilled to the utmost. The Sun has all planets, except the Moon, as spear-bearers.⁷⁰³ However, neither the Sun nor the Moon is at a cardinal point, that is, in ascendant or in midheaven. What about their rulers? As the Moon is in Libra, her ruler is Venus, and Venus is in a dominant position above the ascendant. Thus the Moon fulfils the conditions for a royal horoscope.

What about the Sun? The Sun is in Virgo, so his ruler is Mercury, and Mercury is actually close to the ascendant. However, according to the house method that was current at the time, where houses corresponded to whole signs, Mercury falls into the second house. On the other hand, the Sun is the ruler of the ascendant and "ruler of the birth" because the ascendant is in Leo, the domicile of the Sun. Even though Valens does not explicitly mention this as a condition for royal dignity, it probably should be evaluated similarly to the Sun conjunct the ascendant.⁷⁰⁴

⁷⁰¹ In a parallel text in appendix XI it says "places" (= houses; Vettius Valens, *Anthologia*, Appendix XI, Greek edition of Pingree, p. 421, l. 27).

⁷⁰² Vettius Valens, Anthologia, II,23,2; in the Greek edition of Pingree p. 83, l. 12ff.

⁷⁰³ As Valens does not give an express definition of "spear-bearing", it is reasonable to follow Paulus Alexandrinus' definition, where all planets that precede the Sun in their daily course up to an elongation of 120° are regarded as spear-bearers of the Sun. From an example horoscope of Valens' at least this much is known: that a spear-bearer of the Sun need not be in a phase of visibility nor in the sect of the Sun. (4th example of a "notable and powerful" person in *Anthologia* II,27; in the Greek edition by Pingree on p. 89, 1. 27. There, both Venus and Jupiter are considered spear-bearers of the Sun, in spite of having a very small elongation.)

⁷⁰⁴ Cf. the example horoscope mentioned in the previous footnote, which also belonged to a "notable and powerful" person. The situation is very similar: Although the Sun is not located in one of the four angles, he is the ruler of the ascendant.

Of course one could shift the ascendant slightly to fall within Virgo. In that case, the Sun, together with Mercury, would stand in the first house and in the ascendant, and then Valens' condition for the Sun being ideally in the ascendant for the birth of a king would be fulfilled. Such a "correction of the time of birth" would not contradict this book's theory about the Star of Bethlehem. If Vettius Valens' sidereal zodiac is chosen, then Jesus' birth must be assumed only 20 minutes later for the ascendant to fall within Virgo.

However, negative consequences would have to be accepted elsewhere. Leo in the ascendant goes much better with the birth of a king. Venus, Mars, and Jupiter would no longer be in the ascendant but in the twelfth house, the house of "the bad demon". However, in view of Jesus' fate, this would not be wrong. The Moon, too, would lose her beneficial position. With Leo on the ascendant she falls within the third house, the "house of the moon goddess" in which she "rejoices", in astrological jargon. A Virgo ascendant puts the Moon in the second house, the "gate to the underworld", and her "host" or sign ruler, Venus, is then in the twelfth house where she loses strength.

To sum up: From the point of view of Greco-Egyptian astrology, the birth chart of Jesus shows the birth of a person who is destined or suited to be a king; however, the Sun has a difficult position and it is to be anticipated that this future "king" will come to an unhappy end.

Antigonus of Nikaia has handed down a horoscope that has striking similarities with that of Jesus, namely the horoscope of Gnaeus Pedanius Fuscus, a grand-nephew of Hadrian⁷⁰⁵ who was born on 6 April 113 CE. Antigonus says that Pedanius Fuscus had already been moving towards becoming emperor, but that he was rash and therefore was killed when he was still a young man. Thus he suffered a fate very similar to Jesus, who was accused of wanting to be "king" of the Jews and was executed as a result. The birth chart of Pedanius Fuscus is below:

⁷⁰⁵ Denningmann, *Die astrologische Lehre der Doryphorie*, p. 349ff.



Birth chart of Gnaeus Pedanius Fuscus, 6 April 113 CE.

The similarities with the birth chart of Jesus are remarkable. Here, too, all the planets are spear-bearers of the Sun. In addition, the Moon is standing apart, and the previous evening the first crescent had appeared, as was the case with Jesus. Antigonus writes about this chart:

τὸ μὲν οὖν προφανῆ αὐτὸν γεγενῆσθαι διὰ τὸν Ἡλιον ἐν τῷ ὡροσκόπῷ εἶναι καὶ δορυφορεῖσθαι

That he became a pre-eminent person $(\pi\rho\sigma\phi\alpha\nu\eta\varsigma)$ was caused by the Sun being in the ascendant and being accompanied by spear-bearers.⁷⁰⁶

And Denningmann comments:

Nach den astrologischen Kriterien, die Antigonos ... anwendet, ist die Speertragung hier durchaus vielversprechend: Die Sonne steht im Widder in ihrer Erhöhung und im Aszendenten. Alle fünf echten Planeten fungieren als ihre Speerträger: Saturn und Merkur sind zwar unsichtbar, befinden sich aber in demselben Zeichen wie die Sonne. Mars, Jupiter und Venus sind in der Phase ihrer morgendlichen Sichtbarkeit, wobei Jupiter in den Fischen in seinem Nachthaus und Venus in ihrer Erhöhung stehen.

⁷⁰⁶ Denningmann, ibid.

According to the astrological criteria Antigonus ... applies, the spear-bearing is definitely promising: The Sun is in Aries, in his exaltation and in ascendant. All five genuine planets function as his spear-bearers. In fact, Saturn and Mercury are invisible, but they are in the same sign as the Sun.⁷⁰⁷ Jupiter and Venus are in the phase of their morning visibility,⁷⁰⁸ with Jupiter located in Pisces in his night house, and Venus in her exaltation.⁷⁰⁹

This birth chart also fulfils most of the conditions called for by Vettius Valens for the birth of a king. Only the Moon is not located in a angular house, and neither is her ruler, Venus.

Thus, it seems that according to Greco-Egyptian astrology the birth chart of Jesus really is a royal birth chart, even though not a perfect one. However, one must not assume that Christian-Jewish ideas of an ideal birth chart for a king would align precisely with that of Vettius Valens. This work has shown that the Jewish king was associated with the heliacal rising of Venus, the zodiac sign of Leo, and the Jewish New Year's new moon. Thus, the ideal birth chart for a Jewish king or Messiah would have been as shown on p. 386.

No information is available of any other conditions for the horoscope of a Jewish king. The demand that Vettius Valens makes that the Sun and Moon should be near the ascendant or midheaven can *never* be fulfilled for a Jewish ideal king's horoscope. As against that, the alternative condition that the Moon's ruler should be in the ascendant house is *always* fulfilled because the Moon is situated in Libra, and the ruler of Libra is Venus. On the other hand, the Sun is very close to the ascendant, and as ruler of Leo it is also the ruler of the ascendant. However, it will *always* be in the second house, *never* in the ascendant; and if it should be there, then the ascendant will no longer be in Leo but in Virgo, and the rising morning star will be located in the twelfth house, the "house of the bad demon". It is obvious that the Greco-Egyptian rules for interpretation used above would not have applied in exactly this way for Jewish-Babylonian astrologers.

⁷⁰⁷ Note by D.K.: According to the 15° rule, Saturn will become visible three days later. Antigonus would have regarded this as quasi-visibility, because in his interpretation of Hadrian's horoscope, he evaluates Jupiter, which would become visible after seven days, as quasi visible.

⁷⁰⁸ Note by D.K.: Of course, again according to the 15° rule.

⁷⁰⁹ Denningmann, op.cit., p. 351.



Ideal birth chart of a Jewish king: Venus heliacally rising in Leo on a Jewish New Year's morning; the Sun is in Virgo, and the crescent moon, which had appeared the evening before, is below her feet.

Incidentally, the wish for precisely these three heavenly bodies to be together in an extraordinary position is not surprising. They are the three brightest heavenly bodies, and they can all be observed during the day, even though this is usually difficult in the case of Venus. In Mesopotamia these three formed a triad from very early times.

In addition, the following circumstances may have symbolic import: Virgo —or rather the Sun in her—not only gives birth to Venus, but also to the Moon. It is interesting that Venus, when she comes forth from the Sun in Virgo, always appears in the vicinity of the head of Virgo, which could indicate a "spiritual birth". And the complementarity of both these births is also interesting: While Venus is born from the head of Virgo, the Moon comes forth from the lower part of her body. Does this birth perhaps imply the dichotomy of spirit and flesh?

In Early Mesopotamia the appearance of both Venus and the Moon were associated with ideas that became central for Christianity, namely the *resurrection from the dead*. The appearance of Venus as the morning star is the theme of a myth in which Ishtar descends into the underworld, dies and rises again,⁷¹⁰ while the new moon symbolised the death of a king and the birth of another.⁷¹¹

Two Chart Readings according to Ancient Teachings

It would be highly desirable to hear the opinion of experts in Hellenistic astrology and to learn from them whether or not the birth chart of Jesus has been found in this work would have been plausible to early Christian astrologers. In principle, this should be possible. A considerable number of writings of Hellenistic (mainly Greco-Egyptian) astrologers are still extant. Although it seems that their Babylonian and Jewish colleagues did not use exactly the same methods, it can be reasonably assumed that their methods were not altogether different. For this reason, this author looked for experts in Hellenistic astrology that would be able to read an astrological chart according to ancient methods. Fortunately, he found two such "neo-Hellenistic astrologers" who agreed to do a horoscope interpretation for his Jesus birth chart.

Chris Brennan was educated at *Kepler College of Astrological Arts and Sciences* in Seattle, and he also spent time studying with *Project Hindsight*, a team of American academic astrologers who work on Hellenistic and medieval astrological texts, retranslate and republish them.⁷¹² Later Brennan started his own project on Hellenistic astrology.⁷¹³ He lives and works in Denver, Colorado.

Rafael Gil Brand studied astrology in Madrid in Spain, and after that psychology and religious studies in Hamburg, Germany. Most importantly for the present study, over decades Gil Brand has been constantly engaged in studying the history of astrology. Like Brennan, he was a member of an astrological translation project—the *Escuela de Traductores de Sirventa*—that deals with medieval traditions of Spain,⁷¹⁴ and he has written comprehensive textbooks of classical astrology as well.⁷¹⁵ He lives in Hamburg where he works as an astrologer, psychologist, and therapist.

For this astrological experiment, the two experts were asked to stick strictly to ancient methods and to pretend - as far as possible - that they did not know whose chart they were to interpret. In addition, this author assured

⁷¹⁰ ETCSL 1.4.1, http://etcsl.orinst.ox.ac.uk/cgi-bin/etcsl.cgi?text=t.1.4.1#

⁷¹¹ Jacobsen, *The Harab Myth*, p. 6f.

⁷¹² http://www.projecthindsight.com/.

⁷¹³ http://www.hellenisticastrology.com/.

⁷¹⁴ http://www.geocities.com/Athens/Atrium/5989/index2.html.

⁷¹⁵ Gil Brand, *Lehrbuch der Klassischen Astrologie*, Mössingen, Germany, 2000 (Chiron Verlag); *Himmlische Matrix. Die Bedeutung der Würden in der Astrologie*, Mössingen, Germany, 2006 (Chiron Verlag).

them that he would welcome their conclusions even if they found that there was no affinity between this astrological chart and Jesus. Moreover, he made sure that they worked independently and did not communicate with one another. The two readings can be found in the appendix on pp. 425ff.

In the event, what was the result of this experiment? Brennan summarises his work with the Jesus chart as follows:

While the picture that this presents us is in some ways in keeping with what is known of Jesus' life, in other ways it would force us to change our conceptions of him somewhat, if indeed this is the correct chart. The fact that Venus and Jupiter both make a heliacal rising within seven days of his birth would have been seen as particularly important to a group of astrologers during this time period, especially since both planets are within the exact 15 degree range that was used as the standard in the Hellenistic tradition. The fact that the two "benefics" or "good-doers" were making such a dramatic appearance at the same time in the sign of the zodiac that is commonly associated with kingship and royalty may very well have been interpreted by a group of astrologers at the time that a sort of beneficent leader had been born, and the association of both planets with priesthood in the Hellenistic tradition could very well have prompted them to view this as a sort of religious leader.

Apparently, Gil Brand's understanding was rather similar to Brennan's. On the one hand, he notes "striking agreements" between this chart and Jesus' "life and action". Yet, on the other, he feels that the positions fo the Sun and the Moon are "too weak to astrologically explain such a personality and its consequences".

How serious is this objection? It has been shown that, according to ancient Jewish "astral theology", the Sun and the Moon have to be exactly in these positions, so from this point of view they *must be considered strong*, even though this may not be the case according to Greco-Egyptian astrology. Therefore this author believes that the "striking agreements" between the chart and Jesus' life should have more weight.

One last point is worth mentioning. Gil Brand proposes that the birth time of Jesus be set a couple of hours later, at about 1:36 p.m. local time, so that the Sun falls in the 10th house with the Moon near the midheaven, Venus, Jupiter, and Mars in the 9th house, and the ascendant in Sagittarius. In principle this can be done since, astrologically speaking, the heliacal rising of Venus remains effective for the whole day. Although this proposal is not consistent with Luke 2, where a night birth seems to be indicated, the Sun and the Moon would be in very strong positions, and in addition, a remarkable configuration would be given that Valens describes as follows:

Έαν οἱ ἀγαθοποιοὶ τύχωσιν ἐπὶ τοῦδε τοῦ τόπου καὶ κληρώσωνται τὸν ὑροσκόπον ἢ τὴν τύχην, ὁ γεννώμενος ἔσται μακάριος, εὐσεβής, προφήτης μεγάλου θεοῦ καὶ ἐπακουσθήσεται ὡς θεός.

If the benefics [Venus and Jupiter] are placed in this [9th] house and rule the ascendant or the Lot of Fortune, then the native will be blessed, pious, prophet of a great god (προφήτης μεγάλου θεοῦ), and he will be listened to as a god (ἐπακουσθήσεται ὡς θεός).⁷¹⁶

Although Gil Brand sees good reasons to extend this interpretation to the Jesus chart proposed by this author, the conditions would not be precisely fulfilled unless the birth time is changed according to Gil Brand's proposal.

An Astrologically Highly Significant Date?

As has been stated, the approach of the present work does not need the astrological significance of a horoscope to justify the derived birth date. It also does not have to relate to a rare astronomical event. The approximate time of the birth was indicated by a prophecy, most probably the one of Daniel. The "star", on the other hand, corresponded to the old belief that political and religious leaders of Israel had to be associated with the morning star. Nevertheless, it seems that a rare astronomical configuration was *discovered unintentionally* as well as an astrologically significant date that, from the point of view of ancient astrologers, would surely have been worthy of a Messiah or *Saoshyant*. Early Christians apparently believed that Jesus was born during a Hebrew New Year's Day and during the heliacal rising of Venus near the Virgo new moon.

How often do such heliacal risings occur? In general, Venus makes her morning first appearance fairly regularly every 584 days. Now, since 5 x 584 days equals exactly 8 x 365 days, thus 5 synodic Venus cycles will equal 8 years almost to the day; therefore, heliacal risings of Venus are repeated every 8 years on about the same calendar date and approximately in the same position in the zodiac. Thus, early risings of Venus during Virgo's month recur every 8 years, and a heliacal rising comparable to the one in 2 BCE also occurred in the years 10 BCE and 7 CE. Altogether there are 5 different positions in the zodiac spaced about 72° apart where Venus will rise heliacally during each 8 year cycle.

As it happens, almost exactly after eight solar years, not only the Venus phase, but also the lunar phase recurs, and the Hebrew New Year again falls on almost the same Gregorian date. This eight-year cycle is explained by the following remarkable astronomical commensurability between the cycles of Venus, the Sun and the Moon:

5 Venus cycles	x 583.92 days	= 2919.6 days
8 Sun years	x 365.2422 days	= 2921.938 days
99 new moons	x 29.53059 days	= 2923.528 days

⁷¹⁶ Vettius Valens, Anthology, II,8,1; in Pingree's Greek edition p. 62, lines 3ff.

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Thus, the period of 8 solar years contains not only 5 Venus cycles almost to the day, but also almost 99 new moons to the day. While it is unknown what role this surprising correlation may have played in ancient astrology, it cannot have remained undiscovered. Already in Sumerian hymns from the beginning of the 2nd millennium BCE, Ishtar (Venus) is often placed in a position of equality with Shamash (the Sun) and Sin (the Moon). So, does the crescent moon Madonna with the morning star hark back to this triad?

Strictly speaking, the commensurability of Venus cycles and Earth years is not quite perfect, and those areas in the sky where the risings occur shift clockwise by $2^{\circ}18'$ every 8 years. Thus Venus risings with the Sun in astrological Virgo (using a sign size of 30°) would last for about 13 8-year cycles (= 104 years).⁷¹⁷ After that there is a break of 18 to 19 8-year cycles (= 144 to 148 years), before Venus risings begin to recur with the Sun in Virgo.

Heliacal Venus risings under a Virgo Sun are thus rare, although not extremely rare, and comparatively few people are born on such occasions. However, infrequency in itself does not mean much. Actually, one can always find rare configurations in the sky, since every birth chart is unique, but the symbolic content is seldom as impressive as it is in Jesus' birth chart. Not everything that is rare is also exceptional. The heliacal rising of Venus was an important event astrologically and symbolically, and obviously even more so if the crescent of the New Year new moon appeared just at the same time.

How often does Venus rise heliacally during Virgo's month shortly before a first crescent of the Moon at Virgo's feet in the evening? And how often does this occur on a Jewish New Year's day? In order to be able to answer these questions, this author wrote a computer program. It became apparent that celestial "crescent moon Madonnas" together with a heliacally rising Venus are very rare: They occur only 13 times within the period from 990 BCE to 1911 CE. Owing to the precession of the equinoxes, they can fall on a Jewish New Year only during a period of 3000 years, with a subsequent cessation of 23 000 years. This period ended in 1911.⁷¹⁸

⁷¹⁷ If the constellation of Virgo is used, which covers about 45° on the ecliptic, then such heliacal risings of Venus can occur for 19 8-year cycles.

⁷¹⁸ The program works as follows: It searches for heliacal risings of Venus and in each case calculates the first evening appearance of the Moon that follows. Then the positions of the Sun and the Moon in the fixed star sky are examined: The Sun must be located between the stars Zavijava (β Virginis; $l_{2000}=177^{\circ}$) and Spica (α Virginis; $l_{2000}=203^{\circ}$), the Moon between the stars Spica and Zubeneshamali (β Librae; $l_{2000}=229^{\circ}$). Then it is investigated whether that is a Jewish New Year. For this, the ancient Hebrew religious calendar is used, in which the month of Nisan began with the first sliver of the Moon after the first ripe barley had been found. The beginning of Nisan is therefore set on 1 March (Gregorian) at the earliest and on 31 March at the latest. The resulting dates are:

Several authors, when attempting to interpret the Star of the Messiah, have looked at developments in the sky over a long period and have also evaluated certain ancient celestial configurations in their contexts. For instance, the Jupiter-Saturn conjunction in Pisces in the year 7 BCE is regarded as especially significant because it occurred *three times within a year* due to the direct and retrograde movement of the planets. That such repeated conjunctions must have been more "important" for ancient astrologers than simple conjunctions may be pure speculation but it is plausible. Michael Molnar and Ernest L. Martin both considered the development of the movement of planets over an extended period of time when they evaluated their birth date for Jesus. As we've discussed, the findings of Martin are similar to those of this author, and they fall within a rather extraordinary time astrologically, and within this context into an extraordinary moment.

In the year 2 BCE occurred a three-fold conjunction of Jupiter and Venus (on 17 June, 25 August, and 13 October), and the birth date of Jesus is situated close to the middle one of these three conjunctions. Triple conjunctions of Venus and Jupiter are rare but not extremely so: On average, they occur every 50 years;⁷¹⁹ bet if they must occur in Virgo they are much rarer.

The first of these three conjunctions—the one on 17 June 2 BCE—was both extremely rare and rather spectacular. It has been mentioned already that on this date and for observers in Jerusalem and Bethlehem, the two brightest

	(1)			(2)		(3)	(4)	(5)	(6)
	4	Sep	-989	2.56	d	15.8°	27.3°	192.7°	-
	12	Sep	-770	3.55	d	16.7°	24.8°	199.4°	219 y
	1	Sep	-495	1.55	d	14.8°	18.0°	187.0°	275 у
	10	Sep	-276	3.54	d	17.1°	21.1°	194.7°	219 y
	18	Sep	-65	0.52	d	13.2°	17.8°	200.6°	211 y
	1	Sep	-1	2.55	d	16.5°	29.2°	183.4°	64 y
	8	Sep	210	0.54	d	12.6°	25.3°	189.2°	211 y
	17	Sep	429	2.52	d	15.1°	31.2°	196.9°	219 y
	6	Sep	704	0.53	d	13.0°	23.0°	184.6°	275 у
	15	Sep	923	1.52	d	14.1°	24.4°	191.3°	219 y
	5	Sep	1198	0.53	d	13.4°	26.7°	180.0°	275 у
	13	Sep	1417	1.52	d	14.5°	30.5°	186.7°	219 y
1	23	Sep	1692	1.54	d	13.7°	34.3°	185.3°	275 у
1	25	Sep	1911	1.52	d	14.9°	30.8°	182.2°	219 y
	(1) Gregorian date (before suprise: astronomical year count)								
(2) time from first crescent to first Venus appearance, in days									
(3) elongation of Venus									
(4) elongation of the Moon									
(5) ecliptic longitude of the Sun, equinox J2000 (12000)									
(6) distance of the event from the previous event in years									
	/						±		-

Similar configurations with less precision occurred 8 years before and after each of these dates, for instance on 30 August 10 BCE and on 2 September 7 CE.

The results would naturally change slightly depending on the strictness of the definitions, or if a modern Rabbinic calendar were used.

⁷¹⁹ The next triple conjunctions were in 44 and 113 CE.

planets came so near to each other⁷²⁰ that they seemed to fuse into a single star. This optical fusion of Jupiter and Venus is extremely uncommon. Astronomy buffs who were ready to travel around the globe could see such an event once every hundred years on average.

As mentioned previously, this conjunction has been suggested as a candidate for the Star of the Messiah. From a symbolical point of view it seems very appropriate since it occurred in Leo, the sign of kingship, and only 6° from Regulus, the royal star. In addition, it was a full moon. Indeed, this represents a really extraordinary celestial configuration. Unfortunately, this "Star of the Messiah" cannot be reconciled with the reports in the Bible: Firstly, it was visible in the evening and in the west instead of in the morning, in the east. Secondly, the optical fusion of the two planets only lasted for about two hours and was thus far too brief to fit in with the specifics of Matthew's description. Thirdly, the "going ahead" and the "standing still" of this "star" would be difficult to explain.

In spite of that, astronomers and astrologers would have watched this event with awe. What they might have thought can only be imagined. However, their probable conclusions seem obvious: The fusion of Venus and Jupiter would indicate a sexual union, and since the gods always unite *fruitfully*, the conclusion must have been drawn that *on that day a new god was begotten*. In fact, not born, but begotten! This new god would have had great significance because Venus and Jupiter were very important gods. Mythological speculation would have been rife: What kind of god-child might come from a union between the king of the gods with the goddess of love? Taking into account that Venus-Ishtar was also the goddess of royal rule and of war, it can be stated that the two planets associated with royal rule merged. Was a royal child begotten on that date?

Not only the first, but also the second conjunction of Venus and Jupiter on 25 August 2 BCE, which would have occurred just a few days prior to the birth of Jesus, was quite extraordinary, for on the same day Mercury and Mars joined them in the same degree of the zodiac. Such a precise alignment of these four celestial bodies is also extremely rare.⁷²¹ Although it could not be observed because the Sun was just 7° away,⁷²² a strologers and astronomers nonetheless could have known of its existence based on their ephemerides or calculations.⁷²³ It is even possible that they suspected this

⁷²⁰ Minimal distance 35 arc seconds according to the JPL ephemeris DE431.

⁷²¹ cf. the magi's statement in the Gospel of James 21:2: "We have seen that a very large star among these stars shone and it made them so pale that they were no longer shining."

⁷²² Martin mistakenly assumes that this cluster of planets could have been seen. Martin, *The Star that Astonished the World*, p. 53f.

⁷²³ As the planets were close to the Sun, exact calculations, using the synodic planet cycles, were particularly easy. However, ancient astrologers were not sure *how*

second union of Venus and Jupiter was also perfect, although this was not really the case because Venus had a large southern ecliptic latitude. Three days later the conjunction was less accurate but the Moon and the Sun blended into the group. All celestial bodies, apart from Saturn, covered a zodiacal arc of about $11\frac{1}{2}^{\circ}$. That, too, is an extremely rare occurrence. The fact that in the days following the three planets Venus, Jupiter, and Mars made their heliacal rising would have underlined the great astrological significance of this date.

Ancient astrological writings do not record what such a great conjunction with three subsequent heliacal planet risings could have meant. It is certainly striking that all of the planetary gods of Mount Olympus were gathered together, with only Saturn, who was a Titan in exile and not an Olympian, being absent. Does it not seem as though the Olympians have gathered for a birthday celebration? Only a few days later, on 1 September 2 BCE, when the planetary stellium still loosely existed, Venus made her heliacal rising. It becomes plain that this rising would have been regarded as a special one and a plausible moment of birth for the Messiah or Saoshyant, even more so because the event took place in the month of Virgo. The birth of the morning star from the head of Virgo would surely have been a suitable symbol for an immaculate spiritual birth of the Saoshyant. Did this not refer to the birth of that being who had been begotten on 17 June at the union of Venus and Jupiter? Of course, the time distance of $2\frac{1}{2}$ months would have been too short for a human birth.

The third Venus-Jupiter conjunction on 13 October passed quite unspectacularly. It happened shortly before full moon, just like the first one, and could be observed in the morning before sunrise. Venus passed Jupiter at a distance of almost 2° or four diameters of a full moon. Yet this conjunction also could have been regarded as significant because of the two preceding ones.

Ernest L. Martin, who also connected these Venus-Jupiter conjunctions with the birth of Jesus, adds further unusual occurrences to the picture which involve the royal star Regulus and Leo as the zodiac sign of kingship. These occurrences are the following, to which this author adds a few astronomical particulars not mentioned by Martin:

accurate the conjunction really was, because their algorithms indicated the planets' positions only to within a few degrees.

On 26 August at 0h43m UT (3h38m TT), all four planets, measured ecliptically, were within 16 arcminutes of one another. In the period from 4000 BCE to 4000 CE no comparable conjunction of these four planets can be found. (The most exact ones since then were on the 5th November 1 CE with an orb of 2°28' and on 17 March 1725 with an orb of 1°12'.) However, Venus had an ecliptic latitude of more than -8°41', so the conjunction really had an orb of almost 10°. However, Hellenistic astrologers did not take ecliptic latitudes into account when they were calculating positions.

- On 12 August 3 BCE, a few days after the heliacal rising of Jupiter, Venus joined him in a very close conjunction in the morning sky just 6° away from Regulus in the area of Leo's head. The minimal distance between Venus and Jupiter of 4'20" occurred at 5:26 UT, after the Sun had already risen in Jerusalem. However, three hours before that, at dawn, the distance was only 8', thus about 1/4 of the diameter of the Moon, which is also quite unusual. Three days before this conjunction the waning lunar crescent had joined the two planets. Mercury (invisible) and the Sun were also in Leo during this period. Martin connects these configurations with the Biblical "lion of Judah", "scepter", and "star out of Jacob" Messianic prophecies found at Genesis 49:9f. and Numbers 24:17.⁷²⁴ As previously mentioned, in astrology Leo and particularly the star Regulus were (and still are) associated with kingship.
- Over a period of seven months, Jupiter formed three conjunctions with Regulus, the king's star. At the same time, he made a loop above the star and "crowned" it, as it were.⁷²⁵ On 14 September 3 BCE Jupiter passed Regulus at a distance of 20'. The Jewish New Year and the date of Jesus' birth assumed by Martin were just three days before that, when the distance between the two celestial bodies was not much greater.
- Jupiter turned retrograde on 28 November and once more conjoined Regulus on 17 February 2 BCE. Martin notes an occultation of Regulus by the Moon on the same date,⁷²⁶ but he is mistaken. He probably worked it out geocentrically rather than topocentrically. An occultation of the star would only have been visible from the southern hemisphere. Nevertheless, the rather close conjunction of the Moon, Regulus, and Jupiter was surely impressive.
- On 29 March Jupiter turned direct just 2°40' west of Regulus, and on 8 May he formed the third conjunction with the star and would not return for about 12 years.
- Jupiter next became stationary "in the womb of Virgo" at the end of December in 2 BCE. Martin associates this station with the "standing still" of the Star of Bethlehem.⁷²⁷

In an earlier version of the present work, this author had mentioned that Jupiter became stationary only $2\frac{1}{2}^{\circ}$ to the west of the star *Porrima* (or *Antevorta*, γ *Virginis*),

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⁷²⁴ Martin, *The Star that Astonished the World*, p. 47f.; cf. this author's explanations pp. 355ff.

⁷²⁵ Martin, The Star that Astonished the World, p. 51f.

⁷²⁶ The Star that Astonished the World, p. 51f.

 $^{^{727}}$ Martin asserts that this station occurred on 25 December, and he believes that the traditional Christmas festival is related to it. However, in reality the station took place on 28 December, and the *magi* probably even dated it to the beginning of January. Cf. the explanations given by this author on pp. 178f.

In themselves these events are not rare. A triple conjunction of Jupiter and Regulus also occurred 12 years earlier, and overall there are usually ten such events within a 400-year period. At best it is unusual that the second station of Jupiter took place so close to Regulus. However, when one bears in mind that these astronomical events occurred in the context of other celestial omens that can be connected to the birth of Jesus, they, too, appear to attain a special astrological significance. Martin compares the "circling" of Jupiter above Regulus with the "crowning of a king".

It is certainly remarkable that the date for Jesus' birth found in this work falls exactly within the context of such extraordinary astronomical configurations. Dwight Hutchison in his book *The Lion Led the Way* even went a step further and studied the Hebrew calendar dates on which these astronomical occurrences took place. He believes that in the eyes of Babylonian magi of Jewish background, these occurrences must have been clear signs announcing the Messiah. Hutchison's considerations are certainly interesting, but remain speculative, since it is unknown how significant these configurations were among ancient astrologers.

However, if these are seen as signs from God announcing a one-time event such as the birth of the Messiah, then it should be tested whether this accumulation of "messianic signs" is really so unusual. Undoubtedly, the above series of celestial events is unique and will never repeat in the same way. Nevertheless, comparable series of events in Leo and Virgo could perhaps have taken place at other times and could have been interpreted as announcing the Messiah, too. When nobody cares to search for such "messianic signs" at other times, then of course the ones that occurred near the time of Jesus' birth may seem more extraordinary than they really were.

For example, one could investigate the astronomical configurations around the year 105 CE. As has been stated earlier (pp. 179f.), a merging of Venus and Jupiter could be observed from Jerusalem also on 28 August 105 CE in the morning around 4:29 a.m., and it was a perfect match for the one in 2 BCE. In the evening of the same day, the new moon crescent appeared, which means that it was the beginning of a month. Depending on the calendar then in use, it could even have been the 1st of Tishri, thus the Jewish New

which is named after a Roman goddess of birth. In reality the star might have been given this name only in the 19th century, because Ideler (1809) and earlier authors apparently are not aware of a star of the name of Porrima. (Ideler, *Untersuchungen über den Ursprung und die Bedeutung der Sternnamen*, p. 168-173) However, Allen (1899) asserts that "the Latins" called γ *Virginis* Porrima and Antevorta. (Allen, *Star Names and Their Meanings*, p. 469f.) Time and again the following sources are referred to which, however, do not prove anything at all because they only mention the goddess, not the star: Ovid, *Fastes*, 1, 633; Aulus Gellius, *Noctes Atticae*, 16.16; Macrobius, *Saturnalia*, 1.7.20; Caelius Rhodiginus (Lodovico Ricchieri), *Lectionum antiquarum libri triginta* (Basel 1550), book 25 chap. 30 (p. 983).

Year's day. Again, an absolutely extraordinary celestial event was observed just at the end of a year. The merging of the two planets occurred only $2\frac{1}{2}^{\circ}$ from the king's star Regulus, which is considerably less than the 6° distance of the conjunction in 2 BCE. In the preceding days both Jupiter and Venus had made very close conjunctions with Regulus, with an orb of only slightly more than half a lunar diameter. As has been stated, this "conjunction star" could have been linked with the "Messiah" *Simon bar Kokhba*.

If this merging of planets took place on the morning before the Jewish New Year, then the preceding Passover full moon on 18 March (the 14th of Nisan) occurred very near the star Spica, which, according to Hutchison, represents the "seed of the woman", thus the Messiah. On the same evening there was also a close conjunction of the full moon with Mars. The preceding conjunction of the Moon with Mars on 20 February was an occultation and took place near the feet of Virgo.

Summary

How would ancient astrologers have judged the astrological configuration on Jesus' birthday? The present investigation has first shown that within the frame of old Hebrew "astrology", a heliacal rising of Venus at the beginning of the year, on a new moon in the time of Virgo, was the ideal moment for the birth or vocation of a "Messiah" of Yahweh. However, the *magi* most likely also used the methods of Hellenistic astrology, which are wellknown from the writings of Vettius Valens, Paulus Alexandrinus, Claudius Ptolemy, and other Greek and Latin authors. Using these methods, it has been investigated whether the birth horoscope of Jesus expresses the following four points convincingly, which form central characteristics of Jesus' personality:

- 1. The Magi considered Jesus to be a new-born king.
- 2. Jesus was a kind of priest.
- 3. He identified himself with the poor and the marginalised.
- 4. He came into conflict with the prevalent religious and state authorities, and he was executed.

It turned out that the horoscope fits these four points remarkably well. In addition, two experts in ancient astrology, Chris Brennan and Rafael Gil Brand, have been asked to write an interpretation of this horoscope using ancient methods, and it seems that the horoscope would have been considered to fit the person of Jesus, with some caveats.

What can be concluded from this? Astrologers and people who believe in Jesus may be enthusiastic about this date, and may find it convincing. Readers who think nothing of astrology and also don't believe in a chance birth of Jesus on an astrologically extraordinary date will, however, suspect that early Christians would have assigned this birth date to the Messiah
because of its astrological distinctiveness and that, in fact, Jesus was born on quite a different date. Perhaps the scientifically correct approach to this problem is to treat it as an open question.

The Morning Star in Jesus' "Biography"

Bruce Killian maintains that not only the birth of Jesus, but also other important events in his life are connected symbolically to the heliacal rising of Venus. This author is inclined to agree with this idea, although he thinks Killian is too speculative in applying it. Instead of going into the details of Killian's approach, this author would like to restrict himself to his own arguments in this regard.

Morning Star, Crucifixion, and Resurrection

It has been found that early Christians assumed Jesus to have been born on a Jewish New Year's day. His death and resurrection at Passover are, in a way, "complementary" to this. These two dates, namely the autumn new moon and the spring full moon, were the most important festivals in the Jewish cultic calendar.

The idea that Jesus was crucified and rose again on the Feast of Passover, thus at full moon in the month of Nisan, seems to be related to the idea that this occurrence falls into the "middle of time" or the middle of salvation history. This idea probably already exists in Luke's Gospel:

Ό νόμος καὶ οἱ προφῆται μέχρι Ἰωάννου· ἀπὸ τότε ἡ βασιλεία τοῦ θεοῦ εὐαγγελίζεται...

The law and the prophets were until John. Since that time the kingdom of God has been preached... (Luke 16:16)

Thus salvation history is divided between the time before and the time after the crucifixion. It is interesting to note that from the point of view of the Jewish calendar, the resurrection also falls on a "middle of time" date, and this in three respects: Firstly, it is the month of Nisan, the seventh month when reckoned from the Jewish civil New Year on the 1st of Tishri. Thus the new era begins in the *middle of the year*. Secondly, it is the *middle of the month* and a full moon day. And thirdly, the resurrection probably occurred on a morning, before sunrise, and thus, as the Jewish day always begins with sunset, in the *middle of the day*. Whether this is coincidence or intentional is something that shall be left open to discussion.

Killian points out that Venus had made a heliacal rising shortly before the crucifixion, which took place on 3 April 33 CE.⁷²⁸ However, the year of the

⁷²⁸ However, Kilian's dating of the heliacal rising on 19 March is too early. Assuming perfect atmospheric conditions, the planet would have disappeared on 17 March, and reappeared at the earliest on 23 March in the morning. Otherwise, the evening last visibility could also have been two days earlier and the morning first appearance two to three days later. (archive.is/www.scripturescholar.com/VenusStarofBethlehem.htm)

A date even closer to the crucifixion can be found if the criterion of ancient astrology is used that a celestial body must have an angular distance of 15° from the Sun in

crucifixion is not certain, and it could also have taken place in 30 CE (pp. 21ff.). Still, Killian might be on a very interesting track here. The question of whether Jesus was, in fact, crucified on this day or whether early Christians invented this date is not of primary interest here. If both the birth and crucifixion of Jesus were dated to coincide with heliacal risings of Venus, this is interesting in itself.

The association of death and resurrection with the heliacal setting and rising of Venus is symbolically very plausible. It is also plausible in the history of thought, since it may relate to the myth of Ishtar's descent into the underworld and her subsequent resurrection. The application of this myth to the setting of Venus as evening star and rising as morning star is evident, because Ishtar was considered identical with Venus. Even in detail the death of Jesus is strongly reminiscent of the death of Ishtar. When Ishtar enters the inmost part of the underworld she is sentenced to death. The judges of the underworld set on her "the eye of death" (igi uš₂-a), the "word of wrath" (inim lipiš gig-ga), and the "cry of sin and punishment" (gu₃ nam-tag-tag-ga). Then she is "hung on a post (or nail) (^{ĝiš}gag-ta ba-da-an-la₂). Later, she is taken down from the "post" (^{ĝiš}gag) and revived.⁷²⁹

Also interesting is a hymn of the Syrian saint Ephrem, who lived in the 4th century. Here, too, the crucifixion and resurrection are compared to the setting and rising of stars:

בילות במבב נמתוא צמי באאו . גאבעי אכים נמתוא ען עישא . בעמונת שעשא עשא ממא כומיבא בעשת גנקים בעת נתידא . כונונת גנקים בעת נתידא .

When he was born, the star of light appeared in the air. When he was baptised, light glittered on the water. When he died, the Sun eclipsed in the firmament. When he suffered, the [celestial] lights set with him. When he rose, the [celestial] lights rose with him.⁷³⁰

order to be visible. If so, the evening last visibility of Venus would have occurred on 11 March and her morning first appearance on 1 April, two days before the crucifixion. This error is within the accuracy of ancient ephemeris calculation.

With the birth date of Jesus, i.e. 1 September, the 15° rule was perfectly fulfilled. However, very good visibility provided, the morning appearance of Venus could also have been observed four or five days earlier.

⁷²⁹ ETCSL 1.4.1, the death sentence and the execution are found in the lines 167-172 (cf. 354-356); the "post" is also mentioned in the lines 275 and 279.

⁷³⁰ (Lamy), Sancti Ephraem Syri hymnes et sermones, I, pp. 98-100.

Although Venus is not mentioned explicitly, the association of death and resurrection with the setting and rising of a star is clearly indicated.

Are there any hints in the Bible that could be related to the heliacal rising of Venus in spring 33 CE? It turns out that Luke may be giving an answer to this question:

(1) τῆ δὲ μιῷ τῶν σαββάτων ὅρθρου βαθέως ἐπὶ τὸ μνῆμα ἦλθον φέρουσαι ὰ ἡτοίμασαν ἀρώματα. (2) εὖρον δὲ τὸν λίθον ἀποκεκυλισμένον ἀπὸ τοῦ μνημείου, (3) εἰσελθοῦσαι δὲ οὐχ εὖρον τὸ σῶμα. (4) καὶ ἐγένετο ἐν τῷ ἀπορεῖσθαι αὐτὰς περὶ τούτου καὶ ἰδοὺ ἄνδρες δύο ἐπέστησαν αὐταῖς ἐν ἐσθῆτι ἀστραπτούσῃ. (5) ἐμφόβων δὲ γενομένων αὐτῶν καὶ κλινουσῶν τὰ πρόσωπα εἰς τὴν γῆν εἶπαν πρὸς αὐτάς· Τί ζητεῖτε τὸν ζῶντα μετὰ τῶν νεκρῶν;

(1) ... But on the first day of the week, when it was barely dawn, they came to the grave and brought herb-oils which they had prepared. (2) But they found the stone rolled away from the grave, (3) and when they entered it, they did not find the body of the Lord. (4) And it happened, when they were perplexed about it, and see, two men came to them in lightning-shiny clothes. (5) But when they became afraid and bent their faces to the ground, they said to them: Why are you looking for the living one amongst the dead? (Luke 24:1-5)

What men are these? They are probably angels. However, in the Bible angels often stand for stars, and stars are seen as angels. It has been found that in the episode in Luke 2:8-16, where the shepherds first see one angel and then several angels who announce the birth of the Messiah, these angels had to represent the morning star and other heavenly bodies that appeared shortly after the morning star. The question arises whether the two "lightning-shiny" ($\dot{\alpha}\sigma\tau\rho\dot{\alpha}\pi\tau\sigma\tau\varsigma\varsigma$) men at the grave could be related to an astronomical phenomenon. Interestingly, the women went to the grave "when it was barely dawn", the ideal moment for seeing heliacal planets or stars.

Strikingly, in the days before the crucifixion, in March 33 CE, not only Venus, but Mercury also made a heliacal rising. Is Luke alluding here to these approximately concurrent morning visibilities of Venus and Mercury? While this happened a few days before the crucifixion and the resurrection, looked at astrologically such imprecision is quite acceptable. It is also possible that the tradition is imprecise, since if it was not based on observation but only on calculations, then one cannot count on great precision. In any case, a simultaneous morning visibility of Venus and Mercury was an astrologically remarkable occurrence.

So, what did the sky look like on the morning of Easter, 5 April 33? In fact, Mercury's morning visibility lasted only two or three weeks, and at this time Mercury was already in the process of disappearing. However, under exceptionally favourable conditions, when the women found the empty grave and looked around perplexed, they could see both Venus and Mercury on the eastern horizon. Quite apart from the question of whether or not these two planets made their first morning rising on this day, their position was, astrologically speaking, significant. They were ascending above the eastern horizon, and as such they dominated the horoscope of the moment. Furthermore, this could allude to Job 38:4-7, which says that the morning stars, interpreted as Venus and Mercury, were rejoicing when the cornerstone of the Earth was laid.



Resurrection in the morning of 5 April 33 CE: Venus and Mercury above the eastern horizon may have been the two "lightning-shiny" men.

However, in the Jesus-the-Morning-Star theory, Mercury has only a secondary role. Matthew and Mark each mention just one angel, which would have been Venus. In Matthew the angel came down from heaven, rolled the stone away, and sat on it. "His aspect was like that of lightning ($\tilde{\eta}v \ \delta \epsilon \ \dot{\eta} \ \epsilon i\delta \epsilon a$ $\alpha \dot{\upsilon} \tau \omega \dot{\omega} \dot{\omega} \dot{\sigma} \tau \rho \alpha \pi \dot{\eta}$) and his garment was as white as snow" (Matt 28:3).⁷³¹ Actually, the Greek word *astrape* (= *asterope*), which translates as "lightning" or "brilliance", literally means "star sight".

Does the astrological chart for Jesus' resurrection have other remarkable characteristics? The Sun was in Aries (the ram), which Boll, Malina, and Killian associate with the "Lamb of God". While the symbolism of the "Lamb of God" has its roots in the Jewish practice of sacrificing lambs at Passover, this does not necessarily rule out astrological associations. In Mesopotamia the

⁷³¹ The apocryphal *Gospel of Peter* also tells of *two* angels (IX,36).

constellation of Aries was identified with the the god Tammuz, the lover of the Venus goddess Ishtar, who had also died and come back to life. The analogy with Jesus is evident. In addition, Tammuz was a shepherd, just like Jesus, the "good shepherd" of his "sheep". A further analogy exists in that the death and resurrection of Tammuz were celebrated on specific calendar dates.

Venus and Mercury are rising in the sign of Pisces (the fish), and the fish became a symbol for Jesus Christ in early Christianity. The Greek word for "fish", *IChThYS*, can be regarded as an abbreviation (acronym) for *Iesus Christos Theou hYios Soter*, "Jesus Christ, Son of God, the Saviour".

The association of the resurrection with the heliacal rising of the morning star is also alluded to in the *Exsultet*, the Easter Proclamation used in the Catholic Church during the Easter Vigil. It seems, however, that this is a spontaneous association and was not inspired by the "lightning-shiny" man in front of the empty grave:

Oramus ergo te, Domine, ut cereus iste in honorem tui nominis consecratus, ad noctis huius caliginem destruendam, indeficiens perseveret. Et in odorem suavitatis acceptus, supernis luminaribus misceatur. Flammas eius lucifer matutinus inveniat Ille, inquam, lucifer, qui nescit occasum Christus Filius tuus, qui regressus ab inferis, humano generi serenus illuxit, et vivit et regnat in saecula saeculorum. So we ask you, oh Lord, that this candle which has been consecrated to the honour of your name, in order to destroy the darkness of this night, may last without going out. Receive it in the fragrance of loveliness,

and let it mingle with the lights above.

May the morning star (lucifer matutinus) find its flames,

that morning star, I say, that knows no setting,

your Son, Christ,

who, returning from the dead, shone on mankind bright and fair

and lives and reigns in all eternity.⁷³²

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⁷³² From the Roman Catholic missal.

The Ascension and the Second Coming of Christ

In the Acts of the Apostles, the two men in white robes appear at the Ascension of Jesus:

(9) καὶ ταῦτα εἰπὼν βλεπόντων αὐτῶν ἐπήρθη καὶ νεφέλη ὑπέλαβεν αὐτὸν ἀπὸ τῶν ὀφθαλμῶν αὐτῶν. (10) καὶ ὡς ἀτενίζοντες ἦσαν εἰς τὸν οὐρανὸν πορευομένου αὐτοῦ, καὶ ἰδοὺ ἄνδρες δύο παρειστήκεισαν αὐτοῖς ἐν ἐσθήσεσι λευκαῖς, (11) οῦ καὶ εἶπαν· Ἀνδρες Γαλιλαῖοι, τί ἑστήκατε βλέποντες εἰς τὸν οὐρανόν; οὖτος ὁ Ἰησοῦς ὁ ἀναλημφθεὶς ἀφ' ὑμῶν εἰς τὸν οὐρανὸν οῦτως ἐλεύσεται ὃν τρόπον ἐθεάσασθε αὐτὸν πορευόμενον εἰς τὸν οὐρανόν.

(9) And after He had said these things, He was lifted up while they were looking on, and a cloud received Him out of their sight. (10) And as they were gazing intently into the sky while He was going, behold, *two men in white clothing* stood beside them. (11) They also said, "Men of Galilee, why do you stand looking into the sky? This Jesus, who has been taken up from you into heaven, will come in just the same way as you have watched Him go into heaven." (Acts 1:9-11, NASB)

In Luke's description of the resurrection, the two men in white (or lightninglike) clothes have been explained as the two morning stars Venus and Mercury, with Venus making her heliacal rising. Symbolically, however, the morning first appearance of Venus also fits well with the ascension, because the newly ascended morning star rises a bit higher every day and thus enacts a kind of "ascension". According to Acts 1:3, the ascension occurred 40 days after the resurrection. From an astronomical point of view, it is thus impossible to link both events to a heliacal rising of Venus. If the morning appearance of Venus is assumed on the day of resurrection, then 40 days later around the time of the Ascension Venus would have reached approximately her maximum altitude, and Mercury would have become an evening star. It seems that Luke was no longer aware of the astronomical significance of the two men in white.

The passage quoted above predicts that the second coming of Christ will happen in exactly the same way as he ascended into heaven. And, indeed, the return of Christ on the Last Day was also expected simultaneously with a heliacal rising of Venus. Matthew writes:

ώσπερ γὰρ ἡ ἀστραπή ἐξέρχεται ἀπὸ ἀνατολῶν καὶ φαίνεται ἕως δυσμῶν, οὕτως ἔσται ἡ παρουσία τοῦ υἰοῦ τοῦ ἀνθρώπου.

For like a lightning glow comes from the east and shines as far as the west, so the coming of the son of man shall be. (Matt 24:27)

And Luke:

ώσπερ γὰρ ἡ ἀστραπὴ ἀστράπτουσα ἐκ τῆς ὑπὸ τὸν οὐρανὸν εἰς τὴν ὑπ' οὐρανὸν λάμπει, οὕτως ἔσται ὁ υἰὸς τοῦ ἀνθρώπου ἐν τῆ ἡμέρα αὐτοῦ.

For just as the lightning glow flashes up in one direction of the sky and shines as far as the other, so the son of man shall be on his day. (Luke 17:24)

Again, the "lightning glow" is reminiscent of the men in lightning-like white cloths that appeared at the empty tomb. It can be concluded that, again, Venus makes her heliacal rising at that point. The translations usually render the word *astrape* as "lightning" (Vulgate Lat. *fulgur*). However, the word does not necessarily refer to the electric phenomenon associated with thunderstorms: Dictionaries give the meaning as both "lightning" and "glow". Also, as has been mentioned, taken literally the word means "star sight". The phenomenon of lightning was associated with the "glittering" of stars. This association is already found in Homer's *Iliad* at 11.61-66, where Hector in his twinkling armour is compared both to the star Sirius and to Zeus' flash of lightning. In the German language the verb *blitzen*—which is derived from the noun *Blitz*, "lightning"—means "to flash" as well as "to twinkle" and is also used for the twinkling of stars.

Again, there follows a section in Matthew which apparently says the same thing but uses mythical exaggeration. (Underlined parts of sentences show motifs of the "lightning" verse in changed form.)

(28) ὅπου ἐἀν ἦ τὸ πτῶμα, ἐκεῖ συναχθήσονται οἱ ἀετοί. (29) Εὐθέως δὲ μετὰ τὴν θλῖψιν τῶν ἡμερῶν ἐκείνων ὁ ἥλιος σκοτισθήσεται, καὶ ἡ σελήνη οὐ δώσει τὸ φέγγος αὐτῆς, καὶ οἱ ἀστέρες πεσοῦνται ἀπὸ τοῦ οὐρανοῦ, καὶ ai δυνάμεις τῶν οὐρανῶν σαλευθήσονται. (30) καὶ τότε φανήσεται τὸ σημεῖον τοῦ υἰοῦ τοῦ ἀνθρώπου ἐν τῷ οὐρανῷ, καὶ τότε κόψονται πᾶσαι ai φυλαὶ τῆς γῆς καὶ ὄψονται τὸν υἰὸν τοῦ ἀνθρώπου ἐρχόμενον ἐπὶ τῶν νεφελῶν τοῦ οὐρανοῦ μετὰ δυνάμεως καὶ δόξης πολλῆς. (31) καὶ ἀποστελεῖ τοὺς ἀγγέλους αὐτοῦ μετὰ σάλπιγγος μεγάλης, καὶ ἐπισυνάξουσιν τοὺς ἐκλεκτοὺς αὐτοῦ ἐκ τῶν τεσσάρων ἀνέμων ἀπ᾿ ἄκρων οὐρανῶν ἕως τῶν ἄκρων αὐτῶν.

(28) Wherever there is a corpse, there vultures will gather. (29) But right after the tribulation of those days, the sun will be darkened, and the moon will no longer give its light, and the stars will fall from the sky, and the forces of the heavens shall be shaken. (30) And then shall the <u>sign of the son of man appear in the sky</u>, and then all the tribes of the earth shall mourn and they shall see the son of man <u>coming</u> from the heavens on a cloud with great power and glory. (31) And he shall send out his angels with a loud trumpet blast, and they shall gather his chosen from the four directions of the wind, from one end of the heavens to the other. (Matt 24:28-31, cf. Mark 13:24-27 and Luke 21:25-27)

Here, too, a heliacal rising of Venus seems to be suggested. And there are even more parallels between these celestial occurrences and those that happened around the time of the crucifixion, resurrection, and ascension. Eclipses of the Sun and the Moon are mentioned, and the Son of Man appears in the clouds, "in the same way" as he was carried away in the clouds when he ascended. Apparently, as predicted in Acts 20:12, he returns exactly in the same way as he went into heaven.

There is a parallel in Revelation, where the "lamb" breaks the seven seals of a book. When the "lamb" opens the sixth seal, he says (again, those parts of the sentences that show motifs of the previous quotation are underlined): ... καὶ σεισμὸς μέγας ἐγένετο, καὶ <u>ὁ ἥλιος ἐγένετο μέλας</u> ὡς σάκκος τρίχινος, καὶ <u>ἡ σελήνῃ ὅλῃ ἐγένετο ὡς αἶμα</u>, καὶ οἱ ἀστέρες τοῦ οὐρανοῦ ἔπεσαν εἰς τὴν γῆν...

... and there was a great earthquake; and the <u>sun became black</u> as sackcloth made of hair, and the whole <u>moon became like blood</u>; and the stars of the sky fell to the earth... (Rev. 6:12-13)

Μετὰ τοῦτο εἶδον τέσσαρας ἀγγέλους ἑστῶτας ἐ<u>πὶ τὰς τέσσαρας γωνίας τῆς</u> <u>γῆς</u>, κρατοῦντας τοὺς τέσσαρας ἀνέμους τῆς γῆς... καὶ εἶδον ἄλλον ἄγγελον <u>ἀναβαίνοντα ἀπὸ ἀνατολῆς ἡλίου</u>, ἔχοντα σφραγῖδα θεοῦ ζῶντος...

After this I saw four angels standing at the four <u>corners of the earth</u>, holding back the four winds of the earth, so that no wind would blow on the earth or on the sea or on any tree. And I saw another angel <u>ascending from the rising of the sun</u> (ϵ iδov ἄλλον ἄγγελον ἀναβαίνοντα ἀπὸ ἀνατολῆς ἡλίου), having the seal of the living God... (7:1-2; NASB)

There can be no doubt that this "angel ascending from the rising of the sun" must also be the morning star rising heliacally, and this heliacal rising was accompanied by eclipses. The four angels at the four corners of the earth will be discussed later.

The Son of Man on a cloud also appears in Revelation:

(14) ... ίδοὺ νεφέλη λευκή, καὶ ἐπὶ τὴν νεφέλην καθήμενον ὅμοιον υἰὸν ἀνθρώπου, ἔχων ἐπὶ τῆς κεφαλῆς αὐτοῦ στέφανον χρυσοῦν καὶ ἐν τῆ χειρὶ αὐτοῦ δρέπανον ὀζύ. (15) καὶ ἄλλος ἄγγελος ἐξῆλθεν ἐκ τοῦ ναοῦ κράζων ἐν φωνῆ μεγάλῃ τῷ καθημένῷ ἐπὶ τῆς νεφέλης· Πέμψον τὸ δρέπανόν σου καὶ θέρισον, ὅτι ἦλθεν ἡ ὥρα θερίσαι, ὅτι ἐξηράνθη ὁ θερισμὸς τῆς γῆς. (16) καὶ ἕβαλεν ὁ καθήμενος ἐπὶ τῆς νεφέλης τὸ δρέπανον αὐτοῦ ἐπὶ τὴν γῆν, καὶ ἐθερίσθη ἡ γῆ.

... behold, a white cloud, and <u>sitting on the cloud was one like a son of man</u>, having a golden crown on His head and a sharp sickle in His hand. And another angel came out of the temple, crying out with a loud voice to Him who sat on the cloud, "Put in your sickle and reap, for the hour to reap has come, because the harvest of the earth is ripe." Then He who sat on the cloud swung His sickle over the earth, and the earth was reaped. (Rev. 14:14-16, NASB)

This passage shows another parallel between the astronomical configurations of the crucifixion and the second coming. The harvest is mentioned, and indeed the crucifixion and resurrection happened at the beginning of the barley harvest. If the Son of Man on the cloud is the morning star, then the angel that tells him to reap the earth may be Mercury, for on the day of resurrection Mercury was visible, together with Venus, just above the eastern horizon.

The same themes are repeated shortly after that. As the trumpets sound (chapter 8), a solar and a lunar eclipse are mentioned (8:12, 9:2). Four angels are released, and they kill a third of mankind (9:15). Then something occurs that can be interpreted as the heliacal rising of the morning star:

(1) Καὶ εἶδον ἄλλον ἄγγελον ἰσχυρὸν καταβαίνοντα ἐκ τοῦ οὐρανοῦ, περιβεβλημένον νεφέλην, καὶ ἡ ἶρις ἐπὶ τὴν κεφαλὴν αὐτοῦ, καὶ τὸ πρόσωπον αὐτοῦ ὡς ὁ ἥλιος, καὶ οἱ πόδες αὐτοῦ ὡς στῦλοι πυρός, (2) καὶ ἔχων ἐν τῆ χειρὶ αὐτοῦ βιβλαρίδιον ἠνεϣγμένον.

And I saw another strong angel coming down out of heaven, clothed with a cloud; and the rainbow was upon his head, and his face was like the sun, and his feet like pillars of fire; and he had in his hand a little book which was open. (10:1f., NASB)

What angel is this? The description is reminiscent of the Son of Man who comes on the clouds or "like the lightning":

– Matthew 24:27: "Like the lightning, he comes out from the east and flashes to the west". (cf. Luke 17:24)

– Matthew 24:30: His "sign will appear in the sky", and he will be "coming on the clouds of the sky".

The "lightning" of the Son of Man was interpreted as the heliacal rising of Venus. Could the same interpretation also apply to the angel in the passage quoted above? The "pillars of fire" apparently confirm this, for as has been shown, they probably allude to Moses' "pillar of fire and cloud", which stands for the morning star, too. The fact that "his face was like the sun" may hint at a heliacal phenomenon.

The angel's "coming down" may seem to contradict this interpretation. Would the evening last appearance of a star or the morning last of Venus fit better? However, it must be taken into account that a star at its heliacal rising usually is not seen exactly on the horizon but several degrees above it. Thus, after the morning star had appeared in the eastern sky it would have stood *higher* than John and would have had to "come down" to him in order to talk to him face to face.

A similar "coming down" of a star happened when the three women (or were they two? or one?) arrived at Jesus' empty tomb. There it says:

- Luke 24:4: "Two men suddenly stood near them in dazzling clothing".

– John 20:12f.: Two men in white robes sat in the tomb.

– Matthew 28:2f.: "An angel ... descended from heaven". "His appearance was like lightning and his clothing as white as snow".

- Mark 16:5: There was "a young man sitting" in the tomb, "wearing a white robe".

These verses were interpreted to imply that the women discovered Venus at her morning appearance together with Mercury in the eastern sky and that they received a message from them. Note that only Matthew's quotation has an angel come down from the sky; but perhaps, as has been shown, this does not preclude a heliacal rising.⁷³³

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⁷³³ However, a different case is given in Rev. 8:10f and 9:1, where a star of the name of "Wormwood" "fell from heaven". This statement could allude to the "fall" of the evening star a few days before its heliacal rising.

Apparently, the celestial configuration at the crucifixion and resurrection is exactly the same as it will be at the second coming of Christ. Why is this so? Perhaps because at the second coming another resurrection will take place, the resurrection of all the dead:

ό δὲ θεὸς καὶ τὸν κύριον ἦγειρεν καὶ ἡμᾶς ἐξεγερεῖ διὰ τῆς δυνάμεως αὐτοῦ. Now God has not only raised the Lord, but will also raise us up through His power. (1 Cor. 6:14, NASB; cf. 15:12f., 20f.)

The Transfiguration of the Lord

Another event in the life of Jesus that may have an astronomical-astrological background is the Transfiguration (μεταμόρφωσις, *transfiguratio*) of the Lord. Luke 9 describes the occurrence as follows:

(28) Ἐγένετο δὲ μετὰ τοὺς λόγους τούτους ὡσεὶ ἡμέραι ὀκτὼ καὶ παραλαβὼν Πέτρον καὶ Ἰωάννην καὶ Ἰάκωβον ἀνέβη εἰς τὸ ὅρος προσεύξασθαι. (29) καὶ ἐγένετο ἐν τῷ προσεύχεσθαι αὐτὸν τὸ εἶδος τοῦ προσώπου αὐτοῦ ἕτερον καὶ ὁ ἰματισμὸς αὐτοῦ λευκὸς ἐξαστράπτων. (30) καὶ ἰδοὺ ἀνδρες δύο συνελάλουν αὐτῷ, οἴτινες ἦσαν Μωϋσῆς καὶ Ἡλίας, (31) οῦ ὀφθέντες ἐν δόξῃ ἕλεγον τὴν ἔξοδον αὐτοῦ ῆν ἤμελλεν πληροῦν ἐν Ἱερουσαλήμ. (32) ὁ δὲ Πέτρος καὶ οἱ σὺν αὐτῷ ἦσαν βεβαρημένοι ὕπνῷ· διαγρηγορήσαντες δὲ εἶδον τὴν δόξαν αὐτοῦ καὶ τοὺς δύο ἄνδρας τοὺς συνεστῶτας αὐτῷ.

(28) Some eight days after these sayings, He took along Peter and John and James, and went up on the mountain to pray. (29) And while He was praying, the appearance of His face became different, and *His clothing became white and gleaming*. (30) And behold, *two men* were talking with Him; and they were Moses and Elijah, (31) who, *appearing in glory* (or: *splendour*, D.K.), were speaking of His departure which He was about to accomplish at Jerusalem. (32) Now Peter and his companions had been overcome with sleep; but when they were fully awake, they saw His glory and the two men standing with Him. (Luke 9:28-32, NASB)

The "white flash-like gleaming clothing" (ἰματισμὸς λευκὸς ἐξαστράπτων) of Jesus as well as the two men "appearing in splendour/glory" (ὀφθέντες ἐν δόξη) are reminiscent of the two men in "flash-like gleaming clothes" (ἐν ἐσθῆτι ἀστραπτούση) that were seen in front of the empty grave of Jesus. In both cases the verb *astrapto*, "to flash like lightning", is used. In Matthew's version, Jesus' face shines like the Sun:

(2) καὶ μετεμορφώθη ἕμπροσθεν αὐτῶν, καὶ ἕλαμψεν τὸ πρόσωπον αὐτοῦ ὡς ὁ ἥλιος, τὰ δὲ ἱμάτια αὐτοῦ ἐγένετο λευκὰ ὡς τὸ φῶς.

And He was transfigured before them; and *His face shone like the sun*, and *His garments became as white as light*. (Matthew 17:2, NASB)

Whereas Mark describes it as follows:

(2) ... καὶ μετεμορφώθη ἕμπροσθεν αὐτῶν, (3) καὶ τὰ ἰμάτια αὐτοῦ ἐγένετο στίλβοντα λευκὰ λίαν οἶα γναφεὺς ἐπὶ τῆς γῆς οὐ δύναται οὕτως λευκᾶναι.

(2) ... And He was transfigured before them; (3) and *His garments became radiant and exceedingly white*, as no launderer on earth can whiten them. (Mark 9:2, NASB)

The Greek word *stilbo*, which here is translated as "(to be) radiant", can also be used for stars and planets. The Greek name of Mercury, where it is not called by the Greek god's name, is *Stilbon*, "the radiant one".

That there is some connection between the transfiguration of Jesus and his crucifixion and resurrection is also indicated a few verses later:

Καὶ καταβαινόντων αὐτῶν ἐκ τοῦ ὄρους ἐνετείλατο αὐτοῖς ὁ Ἰησοῦς λέγων· Μηδενὶ εἴπητε τὸ ὅραμα ἕως οὖ ὁ υἰὸς τοῦ ἀνθρώπου ἐκ νεκρῶν ἐγερθῆ.

As they were coming down from the mountain, Jesus commanded them, saying, "Tell the vision to no one until the Son of Man has risen from the dead." (Matthew 17:9)

Καὶ καταβαινόντων αὐτῶν ἐκ τοῦ ὄρους διεστείλατο αὐτοῖς ἵνα μηδενὶ ἃ εἶδον διηγήσωνται, εἰ μὴ ὅταν ὁ υἰὸς τοῦ ἀνθρώπου ἐκ νεκρῶν ἀναστῆ.

As they were coming down from the mountain, He gave them orders not to relate to anyone what they had seen, until the Son of Man rose from the dead. (Mark 9:9)

So, did the disciples have a vision of the resurrected Christ? Does the transfiguration of Christ allude to the astronomical configuration on the morning of the resurrection, the early morning of 5 April 33 CE, where the two planets Mercury and Venus could be seen together above the eastern horizon? Or does it refer to a comparable configuration on a different date?

The connection between the transfiguration and the resurrection already discussed by the early church fathers. Origen writes in his *Commentarius in Matthaeum XII*:

(42) ἐπεὶ καὶ ταῦτα βούλεται ὁ Ἰησοῦς μὴ λεχθῆναι τὰ τῆς δόξης αὐτοῦ πρὸ τῆς μετὰ τὸ πάθος δόξης αὐτοῦ ἐβλάβησαν ἂν οἱ ἀκούοντες (43), καὶ μάλιστα ὅχλοι, τὸν οὕτω δοδοξασμένον ὁρῶντες (44) σταυρούμενον. Διόπερ ἐπεὶ συγγενὲς ἦν τῆ μεταμορφώσει αὐτοῦ, καὶ τῷ ὀφθέντι αὐτοῦ προσώπῷ ὡς ὁ ἥλιος, τὸ δοξασθῆναι αὐτὸν τῆ ἀναστάσει, διὰ τοῦτο βούλεται τότε ταῦτα ὑπὸ τῶν ἀποστόλων λαληθῆναι, ἡνίκα ἐκ νεκρῶν ἀναστῆ.

(42) For Jesus also wants that they do not talk about the [things] of his glorification [that took place] before his [other] glorification after his passion. (43) [For] those who would hear [about it], and particularly the masses, would suffer damage if they saw the one glorified like this (44) on the cross. Thus, since his glorification [that occurred] through his resurrection was related ($\sigma \nu \gamma \nu \epsilon \kappa \varsigma$) to his transfiguration ($\mu \epsilon \tau \alpha \mu \delta \rho \omega \sigma \iota \varsigma$) and to his face that appeared like the Sun, therefore he wants that the apostles talk about these [things] only when he would resurrect from the dead.⁷³⁴

⁷³⁴ Migne, PG 13, p. 1084f.

There is also an analogy with the Ascension and the Second Coming of Christ. With the Ascension, Jesus is carried away by a cloud, and during his Second Coming he is expected to return on a cloud. Interestingly, a cloud also appears during the transfiguration of Jesus:

(34) ... ἐγένετο νεφέλη καὶ ἐπεσκίαζεν αὐτούς· ἐφοβήθησαν δὲ ἐν τῷ εἰσελθεῖν αὐτοὺς εἰς τὴν νεφέλην. (35) καὶ φωνὴ ἐγένετο ἐκ τῆς νεφέλης λέγουσα· Οὖτός ἐστιν ὁ υἰός μου ὁ ἐκλελεγμένος, αὐτοῦ ἀκούετε. (36) καὶ ἐν τῷ γενέσθαι τὴν φωνὴν εὑρέθη Ἰησοῦς μόνος. καὶ αὐτοὶ ἐσίγησαν καὶ οὐδενὶ ἀπήγγειλαν ἐν ἐκείναις ταῖς ἡμέραις οὐδὲν ὦν ἑώρακαν.

(34) ... a cloud formed and began to overshadow them; and they were afraid as they entered the cloud.⁷³⁵ (35) Then a voice came out of the cloud, saying, "This is My Son, My Chosen One; listen to Him!" (36) And when the voice had spoken, Jesus was found alone. And they kept silent, and reported to no one in those days any of the things which they had seen. (Luke 9:34-36, NASB)

The Four Horsemen of the Apocalypse

It has been shown that the celestial occurrences at the Second Coming of Christ are very similar to or even exactly the same as those that took place at the crucifixion and resurrection. However, the Revelation contains more allusions of an astronomical kind that have not been dealt with so far. Some attempts at interpreting them have been made by Boll and Malina. Still, it appears that these theories are just a beginning, and this author wants to add his own thoughts that may take the matter a bit further.

In chapters 6 and 7 of Revelation the "lamb", i.e. the Messiah, breaks the seven seals of a book. The breaking of each seal sets a series of events in motion. At the breaking of the first four seals, the four "living creatures" take action: the bull, the lion, the human being, and the eagle. The events are described as follows:

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1<sup>st</sup> seal (6:1-2):
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One of the four living creatures says with a voice of thunder, "Come." A white horse appears. Its rider has a bow, and he is given a crown and "goes out conquering and to conquer".

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2<sup>nd</sup> seal (6:3-4):
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Another of the four living creatures calls. A red horse appears, and its rider is given a sword. He "takes the peace from earth so that men slay one another".

3rd seal (6:5-6):

Another of the four living creatures calls. A black horse appears whose rider has a pair of scales in his hand. A voice is heard saying: "A quart of wheat for a denarius..." This apparently indicates a famine.

4th seal (6:7-8):

The last of the four living creatures calls. A pale horse appears. The name of its rider is "Death".

⁷³⁵ Who was overshadowed by the cloud, and who entered the cloud? The disciples? Or Moses and Elias?

5th seal:

The souls of "those who were slain because of the word of God" cry out to God that he avenge their blood. They are given white robes and are told to rest for a little while longer.

6th seal (6:12-17):

"... there was a great earthquake; and the sun became black as sackcloth made of hair, and the whole moon became like blood; and the stars of the sky fell to the earth."

(7:1-17): Four angels stand at the four corners of the earth. A fifth angel ascends from the rising of the sun. He has the "seal of the living God". Those who "washed their clothes and made them white in the blood of the Lamb" stand around the throne of the Lamb.

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7<sup>th</sup> seal (8:1-6):
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Seven angels who stand before God prepare themselves to sound their trumpets.

Boll and others identified the Lamb with the constellation Aries, the first sign of the zodiac. Apparently, when the Lamb breaks a seal, a new astrological year begins. Seven seals would then be seven years. Could this be an allusion to the Jewish seven-year cycle or "year week"? One could argue that the years of the Jewish seven-year cycle did not start in spring with Aries or on the 1st of Nisan, but in autumn, on the 1st of Tishri. On the other hand, Tishri was not considered the first month but the seventh of the ecclesiastical year, and the New Year's day celebrated in September was thus at the beginning of the 7th month. Therefore, the beginning of the new year depended on the beginning of the first month, i.e. Nisan. The decision of whether the month Nisan could begin or whether an intercalary month had to be inserted depended on whether any ripe barley could be found in the country at the time. From this point of view, the "seal" of every year was "broken" in spring, and the New Year's festival in autumn was shifted accordingly. Interpreting the seven seals as a Jewish seven-year cycle also makes sense from the point of view of Jewish tradition. There were doctrines according to which the coming of the Messiah was expected at the end of a year week. (cf. quotation on pp. 90f.)

As stated, the astronomical events described above are similar to those that happened at the crucifixion and resurrection. In both cases, eclipses and the rising of a star angel "from surrise" are mentioned, and the latter has been identified with the morning star.⁷³⁶ The text under discussion states that these things happen after the breaking of the sixth seal and thus during the sixth year. As the Jewish week begins on Sunday, it follows that the crucifixion must have happened in a Friday year. A Friday year began in September 32 CE. And, indeed, one of the possible dates for the crucifixion falls into this year, on 3 April 33 CE. It seems that this is the right track.

⁷³⁶ Concerning the heliacal rising of Venus in spring 33 CE and the lightning-shiny angels at the empty tomb, see this author's explanations on pp. 400f. The eclipses are treated on pp. 21ff.

Going deeper into John's vision, Boll identified the "four living creatures" with the "Babylonian constellations of the four seasons", i.e. with Leo (= lion), Taurus (= bull), Pegasus (= eagle), and Scorpio (= human being).⁷³⁷ With this mapping the four "living beings" form a great square, and each of them can be assigned to a season of the year. The lion and the bull do not pose a problem; however, the identity of the remaining two constellations is uncertain. In Hellenistic astrology, Scorpio is not considered a human zodiac sign. Gemini, Virgo, Sagittarius, and Aquarius would be more likely candidates for human signs. Aquarius would actually be the ideal candidate, because it is in square to Taurus and in opposition to Leo. The identification of the "eagle" with Pegasus seems curious since the constellation Aquila (Eagle) does exist in a different place in the sky. Since the Eagle is adjacent to Scorpius, it is quite likely that this constellation occupies the fourth corner of the square.

This mapping of the four creatures seems to be supported by their order of appearance in the following statement of John:

καὶ τὸ ζῷον τὸ πρῶτον ὅμοιον λέοντι, καὶ τὸ δεύτερον ζῷον ὅμοιον μόσχῳ, καὶ τὸ τρίτον ζῷον ἔχων τὸ πρόσωπον ὡς ἀνθρώπου, καὶ τὸ τέταρτον ζῷον ὅμοιον ἀετῷ πετομένῳ·

The first creature was like a lion, and the second creature like a calf, and the third creature had a face like a man, and the fourth was like a flying eagle. (Rev. 4:7)

If the "man" is identified with Aquarius and the "eagle" with Aquila, then this statement enumerates the constellations in the order they are placed in the sky (in east-west direction). This is also the arrangement found on the "World" card in most Tarot decks. However, Gothic sculptors and medieval illustrators preferred a different order which is in agreement with Boll's interpretation.

In order to hold his view that the "eagle" stands for Pegasus and the "human being" for Scorpius, Boll has to refer to Mesopotamian constellations. Indeed, depictions of "scorpion archers" are often found on Kassite boundary stones (so-called Kudurrus). They are chimeras with a human head and chest, a horse's body, and a scorpion's tail. Another human constellation near Scorpius is Ophiuchus, the Serpent-bearer. The "eagle" could be identified with the Mesopotamian constellation of the "petrel" (SIM.MAH), which is located above Aquarius. While this author cannot rule out this solution, he has serious doubts about it, for the reasons mentioned above.

At the breaking of the sixth seal, four angels are mentioned that stand at the "four corners of the earth"; a fifth angel "ascends from the rising of the sun". It is very likely that these angels are the five planets. The "four corners of the earth" may actually refer to four corners of the sky, thus to the four

⁷³⁷ Boll, Aus der Offenbarung Johannis, p. 36.

constellations that Boll identifies with the four "living creatures". The constellations can be rotated to a position that locates them at the four cardinal points, i.e. the "four corners of the earth".

Given that the four "living creatures" are constellations, the riders that they "call" might be four planets. And, indeed, it proves easy to identify them. The riders' horses have different colours, and the riders themselves – i.e. the planetary deities or "angels" that rule them – are in the possession of certain powers. The red horse whose rider instigates war can only be Mars. The "pale" horse whose rider's name is "Death" must be Saturn, according to the teachings of astrology. The black horse's rider has a balance in his hand and is apparently associated with market and trade. It can only be Mercury. And the white horse that "goes out conquering" must be Jupiter.⁷³⁸

The mentioning of the balance raises the question of whether Mercury may be placed in the constellation of *Libra*. On the other hand, it has been found that each of the four planets must be in one of the "four living creatures". As Libra appears as a part of Scorpio in Hellenistic star catalogues, the Babylonian "scorpion man" may indeed be referred to here. Another possibility would be the adjoining zodiac sign Virgo, which is human, too. Libra is located at her feet and may have been considered as belonging to her. The motif of Justitia (Dike) can be referred to here.⁷³⁹ It is possible, however, that the balance appears only as an attribute of Mercury, the planet of trade and commerce.

As the rider on the Jupiter horse has a bow, one may conclude that he is placed in Sagittarius. This conclusion is not mandatory, for Jupiter, as astrological ruler of Sagittarius, can always be considered as having a bow. Interestingly, however, the constellation of the Eagle (Aquila) is placed above Sagittarius. As for the location of Mars and Saturn, this author is not aware of any clues given in the text.

⁷³⁸ Morosow and Malina arrive at similar conclusions, with the only difference that Malina identifies the pale horse rather with Venus than Saturn. However, in Hellenistic astrology Saturn is associated with death, not Venus. Besides, the colour "pale" does not fit at all with the dazzling lustre of Venus. (Morosow, *Die Offenbarung Johannnis*, p. 37f.; Malina, *Die Offenbarung des Johannes*, p. 130f.; *Social-Science Commentary on the Book of Revelation*, p. 100ff.)

Boll and Malina take the attributes of the riders – bow, sword, balance, death – as a reference to the so-called *dodekaeteris*, a twelve-year cycle in which every year is ruled by one of the twelve zodiac signs. The four first seals would then correspond to the years of Leo, Virgo, Libra, and Scorpio. However, the bow and the sword were not current attributes of Leo and Virgo. If, instead, one follows the astrological tradition, the attributes fit much better with the four planets Jupiter, Mars, Mercury, and Saturn. (Boll, *Aus der Offenbarung Johannis*, p. 78; Malina, op. cit. p. 135ff.)

⁷³⁹ Bacchylides, Frg. 5 (Campbell, *Greek Lyric*, Vol. IV); Aeschylus, *The Libation Bearers*, 55ff.

In what way could the four planets have acted in the first four years? If the sixth year (or "seal") started in September 32 CE, as has been assumed, the first year began on 20 September 27 CE. When the astrological chart of this day is calculated, the configuration of the planets is striking: Mercury is in Libra, Jupiter in Sagittarius (below Aquila, the Eagle), Mars in Leo, and Saturn in Taurus. The question arises whether John may have assigned to four consecutive years what actually happened at the beginning of the first year. This seems quite possible, considering the many inaccuracies and mythic exaggerations in his astronomical descriptions. Also, it has to be noted that such celestial configuration on that date cannot easily be considered as a mere coincidence.⁷⁴⁰ Besides, Venus made her evening first appearance just around this date.

What could be the significance of this date? One can only speculate. Nine months later, on 10 June 28 CE, a heliacal rising of Venus occurred. Later, evidence will be found that early Christian astrologers assumed even Jesus' baptism on the day of a heliacal rising of Venus. Do the riders of the Apocalypse thus mark the beginning of the Jewish year in which Jesus was baptised?

However, if this interpretation is correct the text deviates from the idea that the "four living creatures" should form a perfect square. Did John compromise because the astronomical fact that there *was* no better solution than the configuration of 20 September 27 CE? The only other occurrence of this rare distribution of these planets near the lifetime of Jesus was in October and November of 3 BCE.

Although at first glance the events of the fifth year have nothing to do with astronomy or astrology, the martyrs with the white robes are reminiscent of the two angels who appeared at the empty tomb of the resurrected Christ. Their clothes were also white, and this author has identified them as the planets Mercury and Venus in the eastern morning sky. Thus, the question arises whether those people in white robes may be stars. then all of the celestial bodies are included in John's vision: the five planets, the Sun, the Moon, and the fixed stars.

⁷⁴⁰ How often is Jupiter in Sagittarius, Mercury in Libra, and Mars and Saturn each in one of the two signs, Taurus and Leo? It turns out that this has happened only six times between 2000 BC and 2000 CE (in sidereal calculation; twelve times tropically). If, on the other hand, Boll is followed and the "four living creatures" identified with Taurus, Leo, Scorpio, and Aquarius (Pegasus), then no such configuration formed within the lifetime of Jesus, except in 3 BC.

The Ideal Astrological Chart of the Second Coming

In the text that follows, Rev. 8-10, the "seven angels who stand before God" prepare to blow their trumpets. As this may allude to the "Day of Trumpets" or Jewish New Year, it is likely that the seven here again stands for a "week of seven years". Once more, the chronological course of events cannot be linked accurately to astronomical occurrences. Still, it is possible to uncover their original astronomical background. From the text one can isolate the following astronomical clues:

3rd trumpet (8:10-11):

A star called Wormwood falls from the sky and poisons the waters.

4th trumpet (8:12-13):

The Sun and the Moon are eclipsed. An eagle high above "in midheaven" cries "Woe, woe, woe!"

5th trumpet (9:1-11):

A star that had fallen from the sky is mentioned – probably identical to that mentioned at the 3^{rd} trumpet. And again it is said that the Sun is eclipsed. Locusts come out of the earth. They resemble horses but have scorpions' tails and human faces with lions' teeth. They hurt and torment men for five months.

6th trumpet (9:13-21):

Four angels who are linked to the four horns of the altar of God are released to kill men. Their horses have lion heads and their tails bite like poisonous snakes.

(10:1-7): An angel comes down from the sky. He is clothed with a cloud, his face is "like the sun", and his feet are like pillars of fire. He gives John a book to eat.

At the sixth trumpet, four angels who are associated with the four horns of the altar of God (9:13-15) are released to kill men, and a fifth angel comes down from heaven clothed in a cloud, with a sun-like face and legs that resemble pillars of fire (10:1). This resembles the occurrences at the breaking of the sixth seal: Four angels stood at the "four corners of the earth" (7:1-2), while a fifth angel appeared in the east (7:2).

The appearance of the fifth angel has already been interpreted as the heliacal rising of Venus. The other four angels might be the other four planets. Moreover, it is likely that they are located in the four constellations that are called the "four living creatures" in the text. As they are linked with the four horns of the altar of God and the "four corners of the earth", they apparently form the shape of a square. It is probable that this is simply a variation of the motif of the four horsemen of the Apocalypse.

One may argue that the apocalyptic horsemen are assigned to the first four seals whereas the four angels here belong to the sixth seal. Yet it is highly likely that the four angels are in fact the horsemen of the Apocalypse. The writer of the text is not necessarily aware of the original astronomical meaning of its sources and *topoi*, and one cannot expect that all descriptions are astronomically accurate. What is interesting, though, is the fact that the four angels at the four corners appear together with the fifth angel. Similar descriptions are found in the gospels. When the sign of the Son of God appears and He comes on the clouds, angels "gather together His elect from the four winds, from one end of the sky to the other" (Matt. 24:28-31).

Even the motif of the solar and lunar eclipses that were mentioned at the breaking of the sixth seal is repeated in the account of the fourth and fifth trumpet. Therefore it seems that the text passage of the seven trumpets is simply a variation of the passage about the seven seals, although the chronological order is not exactly the same.

It becomes clear, on the one hand, that the text passages under discussion describe a celestial configuration that will indicate the Second Coming of Christ. On the other hand, this same configuration would also have been the ideal astrological chart for the crucifixion and resurrection, or the ascension. "Unfortunately" no such configuration occurred during the lifetime of Jesus. Nevertheless, it can be described in detail:

- The configuration occurs at a Passover.
- There is a lunar eclipse, and a solar eclipse occurred either two weeks before or after it.
- Venus makes her heliacal rising.
- The four other planets are located in the signs Taurus, Leo, Scorpio, and Aquarius. According to the teachings of ancient astrology, Mars has its domicile in Scorpio and Saturn in Aquarius. Mercury can only be in Taurus because its maximum elongation from the Sun is 29°, which is in Aries. Jupiter fits well in the royal sign of Leo.

With this information, an astrological chart can be drawn:



Ideal chart of the second coming of Christ.

Did this configuration ever occur or will it ever occur? The answer may be yes, but it cannot be found within the period of 24,000 BCE to 24,000 CE.⁷⁴¹

The Ideal Birth Chart of the Messiah

As has been mentioned, in 3 BCE, remarkably close to the birth of Jesus, the four planets Mercury, Mars, Jupiter, and Saturn were located in the "four living creatures". According to some early Christian authors this was, indeed, the birth year of Jesus. For instance, Clement of Alexandria was of the opinion that Jesus was born in 3 BCE. However, astrological considerations were not part of his argumentation.

The configuration lasted from about the middle of October until the end of November 3 BCE, with a break in the first half of November when Mercury

⁷⁴¹ This author wrote a computer program that searches for such configurations between 5000 BCE and 5000 CE. Because of the precession of the equinoxes, the Passover cannot fall into the time of Aries for thousands of years before and after this period.

entered into Sagittarius for several days. Also interesting: Within the same period Venus, the fifth planet, had disappeared as morning star and was about to reappear as evening star. In other words, Venus had "fallen" from the sky and disappeared into the earth, and within a few weeks she was expected to reappear as the evening star. Could these events be identified as the falling star and the angel that appears with a face "like the sun"?

There is one more point that should be noted. The text mentions beings that are like horses with a scorpion's tail (or snake-headed tail) and a human head with lion's teeth (or a lion's head). This description accords well with the Babylonian constellation of the scorpion archer, and that is where the Sun and Venus were during the time of the above-mentioned configuration. Moreover, the plague lasts for five months, which roughly covers the period until the ingress of the Sun into Aries (the Lamb) and the beginning of a new astrological and cultic year.

Only the eclipses of the Sun, the Moon, and the stars—mentioned in the account of the trumpets—are missing from this configuration.

The question arises: Could there have been an early Christian tradition that assumed Jesus' birth around that time, possibly on 29 November 3 BCE? Could Clement's date be a clue to this?

Here one may remember the legend mentioned earlier about the birth of Abraham. On the same night that Abraham was born a star rose in the east, flew to the west, and devoured four other stars that stood at the four corners of the earth (vide pp. 270f.). Although on the date under discussion it was not the morning star that appeared, but the evening star, a passionate Christian astrologer in his attempt to find the birth chart of Jesus would certainly have made compromises.

But why would a birth chart of Jesus appear in a vision of the end of days? This question has already been treated. John's vision of the Woman of the Apocalypse—which also has been interpreted as an astrological "birth chart" of Jesus—follows immediately after the vision of the seven trumpets. It has been suggested that the birth chart of Jesus would have to contain his complete destiny, in particular that at the end of time he will create a new world and will be crowned king (vide this author's statements on pp. 338ff.). The fact that these two "birth charts" are not identical and are based on two different birth dates does not really matter. It is possible that different theories about the birth date of Jesus were compiled in this text.

From all this it can be concluded that in the opinion of ancient Jewish and Christian astrologers, the birth and the Second Coming of the Messiah ideally had to happen on a day

- on which Venus made her heliacal rising,
- on which Mercury, Mars, Jupiter, and Saturn were located in the four signs Taurus, Leo, Scorpio, and Aquarius,
- that was a Jewish New Year's day,
- that followed a total solar eclipse visible from Palestine,
- and was followed by a lunar eclipse about two weeks later.

Mercury must be located in Leo, as its maximum elongation is 29° and the Sun is in Virgo. The other three "living creatures" would be too far away from Virgo, so Mercury cannot be there. Mercury and Venus can be put close together, because the two morning stars also appeared together on the day of resurrection, and according to Job 38:7 on the day of creation. Mars fits well in Scorpio because this sign is one of its two domiciles. The same is the case with Saturn in Aquarius. Jupiter must be in the remaining sign of Taurus, which is in culmination. This also accords well, because Jupiter is a maker of kings. The lunar node in the degrees behind the Sun indicates that the preceding new moon produced a solar eclipse and at the following full moon there will be a lunar eclipse.

Such a birth chart would have looked as follows:

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Ideal astrological chart of the Messiah's birth or his second coming. The chart also accords with the legend of the birth of Abraham mentioned on pp. 338ff.

It goes without saying that such a configuration is extremely rare. If one insists that the configuration must take place on a Jewish New Year, then this chart has never occurred during the last 26,000 years and will not occur for the next 23,000 years. Even if one dispenses with the eclipses and omits the condition that it must be a Jewish New Year, and even if one accepts different placements of Mars, Jupiter, and Saturn in "the living creatures", no fitting date can be found in the period 5000 BCE to 5000 CE.

The Morning Star and the Baptism of Jesus

An important event in Jesus' life was his baptism in the River Jordan. There the following happened:

(16) βαπτισθεὶς δὲ ὁ Ἰησοῦς εὐθὺς ἀνέβη ἀπὸ τοῦ ὕδατος· καὶ ἰδοὺ ἠνεῷχθησαν οἱ οὐρανοί, καὶ εἶδεν πνεῦμα θεοῦ καταβαῖνον ὡσεὶ περιστερὰν ἐρχόμενον ἐπ' αὐτόν· (17) καὶ ἰδοὺ φωνὴ ἐκ τῶν οὐρανῶν λέγουσα· Οὖτός ἐστιν ὁ υἰός μου ὁ ἀγαπητός, ἐν ῷ εὐδόκησα.

(16) And when Jesus had been baptised, he immediately went up out of the water. And see, the heavens were opened to him, and he saw the Spirit of God come down like a dove and descend on him. (17) And see, a voice (came) from heaven and said: This one is my beloved son, in whom I am well pleased. (Matt 3:16f.; cf. Mark 1:10f. and Luke 3:21f.)

The Gospel of the Ebionites, of which only fragments exist, adds:

έγὼ σήμερον γεγέννηκά σε. καὶ εὐθὺς περιέλαμψε τὸν τόπον φῶς μέγα.

Today have I begotten you. And immediately the place was lit up by a great light. 742

At first glance this text does not sound like an astronomical description. However, the dove is the bird associated with Venus and Aphrodite and the related near eastern goddesses of fertility: Astarte, Tanit, and all the others. Incidentally, the Greek word the Gospel writers use for "dove", *peristera*, is derived from the Semitic *perach-Ishtar*, "bird of Ishtar".⁷⁴³ If this text were not in the Bible but in another old oriental myth, the voice heard with the dove would probably also be attributed to Ishtar. Whoever was king in Assyria thought of himself as the beloved son of Ishtar and considered himself called by her, while Jesus was the beloved son of God and called to be the Messiah or king of the Jews.

The goddess with the dove is reminiscent of depictions of Mary's concepttion of Jesus showing the Holy Ghost coming to her in the shape of a dove. Is this perhaps simply a Christian reinterpretation about an ancient goddess? An even more obvious connection between the goddess and Mary is made when she is addressed as a dove, as for instance in the Coptic liturgy:

Хере не Царіа: †бронпі сөнесшс: өнетасцісі нан: иФ† піхотос Hail to you, Mary, beautiful dove who has given birth to God, the Logos. ⁷⁴⁴

⁷⁴² Peisker, Evangelien-Synopse der Einheitsübersetzung, p. 17ff.

⁷⁴³ according to Assmann, περιστερά, in: *Philologus* 66 (1907), p. 313f. *Perach* actually means "shoot, sprout, descendant, young bird" (cf. Arab. *farḥ*, "sapling, fledgling"; Hebr. *por^eḥah*, "bird").

⁷⁴⁴ http://www.coptic.net/prayers/StBasilLiturgy.html

Returning to Jesus' baptism—the fact that the dove of the Holy Spirit descended on him when he "went up out of the water" is interesting. Could one possibly interpret this incident as the Holy Spirit descending on Jesus during a heliacal rising of Venus?

Perhaps the Ebionite Gospel gives another hint: The baptism resembles a kind of "birth", and a "great light lit up the place". Could this have been the morning star? Is the theme of the birth star repeated here?

An other clue may be contained in the fact that in the early centuries the birth and the baptism of Christ were believed to have occurred on the same day, namely on Epiphany on 6 January. An anonymous Syrian scholar of the 12th century writes:⁷⁴⁵:

In the month of January ("the second *konun*") was our Lord born, on the 6th, just on the day on which we celebrate Epiphany; because the ancients observed on one and the same day the feast of the birth and that of Epiphany. For, this is the day he was born and baptised, and on which even nowadays the Armenians celebrate both [events] on one day as the same festival. And the Scholars also sometimes speak about both [events/festivals] at the same time.⁷⁴⁶

Now, common Aramaic (= Syriac) terms for "Epiphany" were bēt denhō (خيلا أينك), i.e. "House of the rising" or "of the Orient", and ' $\bar{l}d\bar{o}$ d^edenhō (خيلا أينكم), i.e. "festival of the rising". The basic meaning of the word denhō is "rising", "appearance" of a celestial body. In astrology, it also denotes "ascendant, prominent planet or star"⁷⁴⁷ and "star that rises at the birth moment". This could be an allusion to the "rising" (ἀνατολή) of the Star of Bethlehem.⁷⁴⁸

⁷⁴⁵ Assemanus, *Bibliotheca Orientalis Clemento-Vaticana*, vol. 2, p. 164.

⁷⁴⁶ The Latin translation by Assemanus reads:

Mense Ianuario natus est Dominus eodem die quo Epiphaniam celebramus, quia veteres uno eodemque die festum nativitatis et Epiphaniae peragebant, quoniam eadem die natus et baptizatus est. Quare hodie etiam ab Armenis uno die ambae festivitates celebrantur. Quibus adstipulantur Doctores, qui de utroque festo simul loquuntur.

⁷⁴⁷ Payne Smith, *A Compendious Syriac Dictionary*, p. 95: "*the rising* of sun or stars, *sunrise*, *dayspring*; *brightness*, *light*. Metaph. *the shining forth* or *manifestation* of our Lord in the flesh, ... Astrolog. *the ascendant* or *predominant star*, *the horoscope*, i.e. that part of the heavens which arises in the east at the hour of birth."

⁷⁴⁸ In the Aramaic translation, Matthew 2:2 and 9 have the word *madn^ehō* ((مَجْدِنِيْهُ), "rising, east", which belongs to the same root as *denhō*. Luke's "rising from on high" in Luke 1:78 is translated using the word *denhō* (تَدِنيُنَهُ شُوْ أَمَرُكُمُ).

Also interesting is another Aramaic expression for "Epiphany", namely ' $\bar{t}d\bar{o}$ da'mod \bar{o} ($\bar{t}z \to \bar{t} \to \bar{t}z \to \bar{t}$), which translates as "festival of the baptism", but could also be translated as "festival of the setting (of a celestial body)". The word "emod \bar{o} ($\bar{t}z \to \bar{t}z \to \bar{t}$) denotes "setting (of a celestial body), immersion, baptism".⁷⁴⁹ Thus in Aramaic—which was the language of Jesus—the baptism, which is an immersion and re-emergence from the water, is associated with the setting and rising of a star, and Epiphany is both "the festival of the setting (= the baptism)" as well as "the festival of the rising (the appearance)".⁷⁵⁰ This is obviously the reason why Matthew says, apparently alluding to an astronomical occurrence:

(16) βαπτισθεὶς δὲ ὁ Ἰησοῦς εὐθὺς ἀνέβη ἀπὸ τοῦ ὕδατος· καὶ ἰδοὺ ἠνεψχθησαν οἱ οὐρανοί,

After being baptized, Jesus went up immediately from the water, and behold, the heavens were opened... (Matthew 3:16)

The association of birth and baptism in Epiphany also shows that the baptism is considered to be comparable to a "birth". Furthermore it seems that the immersion and emergence is analogous to death and resurrection, which were also linked to the heliacal setting and rising of Venus.

This is also confirmed by Saint Ephrem in the lines that have already been cited in connection with the crucifixion and resurrection. Let them be cited again:

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בעודת בחבב נחתוא צעיי באאו .
גארער אכים נחתוא גר ביאי .
ברמולת שרשא עידא תמא כומילא
בנועת גותה ברת נתולא .
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When he was born, the star of light appeared in the air. When he was baptised, light glittered on the water. When he died, the Sun eclipsed in the firmament. When he suffered, the [celestial] lights set with him. When he rose, the [celestial] lights rose with him.⁷⁵¹

The last too lines seem to refer to the crucifixion and resurrection. However, the Aramaic word for "to set" (*"emad*), which here is associated with the crucifixion, also means "to be baptised" and is used in exactly this sense in the second line. Thus, crucifixion and resurrection are analogous to the

⁷⁴⁹ Payne Smith, *A Compendious Syriac Dictionary*, p. 416: "*the setting* of the sun or stars; *a plunge, somersault; dipping; baptism, the act* or *rite of baptism*".

⁷⁵⁰ That this is not just a coincidence is also obvious from the mention of light in another Aramaic expression for Epiphany: $\overline{i}d\bar{o} \ d^e n\bar{u}hr\bar{e} \ (\cancel{2}n\bar{u}hr\bar{e})$, i.e. "festival of light, of enlightenment".

⁷⁵¹ (Lamy), Sancti Ephraem Syri hymnes et sermones, I, pp. 98-100.

immersion and re-emergence of the one who is baptised and also analogous to a "setting" and "rising" of a star. However, the text also associates the "rising" with the birth. For, as has been stated, the word for "rising" ($denh\bar{o}$) also means "Epiphany". In Ephrem's time, Epiphany was both the festival of Jesus' baptism and his nativity festival.

In another place, Ephrem writes:

לבד היא ההכבהה שאא . סאבוסם העתם, וליסא . לבד באנא בהשלטאאא . סאולינהם בתם, ע_עוא . בת המבבחת, הומהו החת.

He clothed himself with the waters of the baptism, and beams of light shone forth from them. He clothed himself with linens in death, and his bright victory appeared in them. In his humiliations are his exaltations.⁷⁵²

Here again, it is evident that the two statements—the one concerning the baptism and the other concerning death and resurrection—are analogous and, in some way, actually "the same".

If all these considerations are correct, then not only the birth of Jesus was associated with the heliacal rising of Venus, but also his resurrection, his transfiguration, and his baptism. The question arises whether a date can be found where Venus made a heliacal rising and which early Christians could have considered the date of Christ's baptism.

About the timing of the baptism, Luke states:

Καὶ αὐτὸς ἦν Ἰησοῦς ἀρχόμενος ὡσεὶ ἐτῶν τριάκοντα, ...

And Jesus was at the beginning of approximately 30 years... (Luke 3,23)

If one accepts that Jesus was born in 2 BCE, the rising of Venus on 12 January 30 CE would be a possible date. That of 10 June 28 CE might have been too early. Interestingly, the gnostic sects of the Basilidians celebrated the baptism of Jesus on 10 or 6 January.⁷⁵³

⁷⁵² (Lamy), Sancti Ephraem Syri hymnes et sermones, II, pp. 469f.

⁷⁵³ Clement of Alexandria, *Stromateis*, 1.21.146,1f.

Summary

Early Christians believed that the morning star played a role not only at the birth of Jesus but also at other significant times in his life.

1. According to Luke, on the morning of the resurrection two men appear at the grave of Jesus who wear "gleaming clothes" (ἐν ἐσθῆτι ἀστραπτούσῃ, Luke 24:4). According to Matthew and Mark, however, it is only one man. Could these "gleaming" (literally "star-flashing") men represent celestial bodies that make their morning (heliacal) appearance? Interestingly, in the beginning of April 33 CE—which is one of the two most plausible dates for the cruci-fixion—Venus just made a heliacal rising. On the morning of Easter, 5 April, both Venus and Mercury could be observed just before sunrise above the eastern horizon. This also fits mythological ideas of the ancient Orient concerning the death and resurrection of the Venus goddess Ishtar-Inanna.

2. According to Acts 1:9-11, two men in white clothes also appear 40 days later on the day of the Ascension of Christ. Although astronomically it is not possible that the same celestial configuration recurs after only 40 days, the symbolic affinity of Christ's "ascension" with the "ascent" of a star is obvious. It is plausible that the same astronomical event could have been associated with both events, the resurrection and the ascension of Christ.

3. In the same passage it is also stated that Jesus would return in the same manner that he left. Also, Matthew and Luke prophesy that the "son of man" will appear like a "flash of a star" ($\dot{\alpha}\sigma\tau\rho\alpha\pi\dot{\eta}$) from the east and shine to the west (e.g. Matthew 24:27; Luke 17:24). This might be an allusion to a heliacal rising of Venus, too. Incidentally, a solar and lunar eclipse will allegedly accompany the Second Coming of Christ. Both a solar and a lunar eclipse were also believed to have taken place near the time of the crucifixion.

4. Apparently it was also believed that the morning star played a role with the baptism of Jesus: The sky opened and the Holy Spirit came down in the shape of a dove. The dove was the bird of the Venus goddess Ishtar, and the Greek word used for "dove", *peristera*, goes back to Semitic *perach-Ishtar*, "bird of Ishtar". The apocryphal Gospel of the Ebionites also mentions a light phenomenon at the moment of the baptism.

5. Furthermore, the astronomical clues given in the Revelation in the context of the "seven seals" and "seven trumpets" have been studied, and an "ideal horoscope" of the Second Coming of Christ as well as the birth of the Messiah was derived from them. However, the described astronomical configuration did not occur in the time of Jesus.

Appendix

Hellenistic Chart Reading by Chris Brennan

From the perspective of a Hellenistic astrologer, this would not be seen as a terribly eminent nativity at first glance. Using the trigon lords⁷⁵⁴ of the sect light⁷⁵⁵ technique described by the 2nd century astrologer Vettius Valens,⁷⁵⁶ the chart would be seen as representative of someone of moderate social status, with a middling amount of support underlying the basic foundation of the native's life. This



is due to the fact that the sect light, which is the Moon in this chart, is in an air sign, and the two primary trigon lords associated with the air triplicity, Mercury and Saturn, are in succedent houses⁷⁵⁷. Such positioning is said by

⁷⁵⁴ Note by D.K.: Three zodiac signs are attributed to each of the four elements fire, earth, air, and water. Signs of the same element are always 120° from one another and thus form an equilateral triangle or *trigon*. Every trigon has a different "ruling planet" or *"lord"* depending on whether the birth happened during the day or at night.

⁷⁵⁵ Note by D.K.: *sect light*: The Sun and the Moon form so-called *sects* or parties (αἰρέσεις). Venus and Mars belong to the sect of the Moon, Jupiter and Saturn to the sect of the Sun. Mercury can belong to either sect. Day births are "ruled" by the sect of the Sun while night births – as in the case of our Jesus chart – are ruled by the sect of the Moon.

⁷⁵⁶ See Vettius Valens, *Anthology*, Book 2, Chs. 1, 2, 22, in *Vettii Valentis Antiocheni Anthologiarum libri novem*, ed. David Pingree, Teubner, Leipzig, 1986. The technique is used in a similar way by the 1st century astrologer Dorotheus of Sidon. See Dorotheus of Sidon, *Pentateuch*, Book 1, Chs. 22, 24, 25, 26; in Dorotheus Sidonius, *Carmen Astrologicum, Interpretationem Arabicum in lingvam Anglicam versam vna cvm Dorothei fragmentis et Graecis et Latinis*, ed. David Pingree, Teubner, Leipzig, 1976.

⁷⁵⁷ Note by D.K.: Houses and signs are called

^{-- &}quot;angular" (κέντρα), if they contain either the ascendant or descendant or square the ascendant. This is the case with the 1st, 4th, 7th, and 10th houses. The 10th house is considered the house of the midheaven although, astronomically, this is not always correct.

^{-- &}quot;succedent" ($\dot{\epsilon}\pi\alpha\nu\alpha\phi\rho\rho\dot{\alpha}$, "post-ascension"), if they follow an angular house. Succedent houses are the 2nd, 5th, 8th, and 11th houses. In our chart, Mercury is in the 2nd and Saturn in the 11th house, thus both are in succedent houses.

Valens to be indicative of middling (μ έσας) circumstances in both the first and second part of the native's life.⁷⁵⁸

The native would have appeared to be particularly handsome or attractive, with Venus making an appearance $(\phi \dot{\alpha} \sigma \varsigma)^{759}$ in the 1st house, and he would generally conduct himself in an honorable manner with Jupiter there as well⁷⁶⁰, although he would still be rather direct or assertive in his demeanor due to the commixture of Mars. This last point is somewhat important because while the native would come off as assertive, he would not necessarily be aggressive, as Mars' sect status⁷⁶¹ ensures that these tendencies are directed in a more constructive fashion. Some additional general points can be gleaned from Valens' delineation of these three planets when they are together in the same sign in a chart:

Jupiter, Mars and Venus bring about [people] that experience much joy and like to interact with others, people one regards as worthwhile for [entering into] closer relationships with and to grant benefits to, those who are advanced, who are supported by women, some also who have the office of being a high priest (twàc ἀρχιερατικούς); who wear wreaths (στεφανοφόρους), be it wreaths of athletes or [wreaths] of those who conduct the holy [celebrations or sacrifices], or [wreaths which] are [bestowed] by crowds of people; people who pursue entertainments and who spend their time according to opportunities unsettled and unseemly; those who [have] reprehensible and indiscriminate meetings [with women] (ἐπιψόγους καὶ ἀδιαφόρους πρὸς τὰς συνελεύσεις); those who have to suffer public exposition and betrayal (δειγματισμούς, προδοσίας ὑπομένοντας); those who are grieved relative to the topic (τόπος) of children and bondsmen, who enjoy new (sexual) relationships and who have to suffer separation from women.⁷⁶²

Note in particular the emphasis on the priestly role due to Venus and Jupiter, which is accentuated in this chart due to the fact that both planets make a heliacal rising within seven days of the native's birth, as well as the notion of betrayals due to Mars.

With the ruler of the ascendant⁷⁶³ in the 2nd house the topic of material possessions and livelihood would be one of the primary concerns of the native

⁷⁵⁸ Valens, Anthology, Book 2, Ch. 2: 3.

⁷⁵⁹ Note by D.K.: i.e. a heliacal rising.

⁷⁶⁰ Note by D.K.: i.e. in the 1st house, like Venus.

⁷⁶¹ Note by D.K.: Mars belongs to the sect of the Moon. With night births, as is the case with our chart, the "status" of this sect is that of the ruler of the chart.

⁷⁶² Valens, Anthology, Book 1, Ch. 20: 19.

⁷⁶³ Note by D.K.: The ascendant is in Leo, the domicile of the Sun, hence, the Sun is its ruler.

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^{-- &}quot;cadent" (ἀπόκλιμα, "decline"), if they precede an angular house. These are the $3^{rd}, 6^{th}, 9^{th},$ and 12^{th} houses.

Astronomically, these expressions fit best for the houses around midheaven: the one "post-ascends" midheaven, the other has started to sink.

throughout the course of their life. With Mercury in Virgo in the 2nd, ruling the Lot of Spirit⁷⁶⁴, he would have had some inherent oratorical ability, and much of his livelihood would have come through writing, speaking, or perhaps jobs that involve handicrafts of some sort. Indeed, Mercury is the strongest planet in the chart in some respects, since it is the only one in its own domicile, and it is from this placement that the native would draw most of his strengths and abilities.

However, the negative influence of Saturn is particularly severe in this chart because it occupies a place in which it is afflicting two vital components of the nativity. Saturn is the contrary to the sect⁷⁶⁵ malefic and it is not placed in one of its own signs, and thus it is automatically the most qualitatively negative planet in the chart. It is also the most elevated planet, and it is configured by a superior square to Mercury and the Sun, thus rendering them in a state of "maltreatment", "corruption" or "affliction" (κάκωσις).⁷⁶⁶ On one level this is problematic from the perspective of the health and longevity of the native because the Sun is the ruler of the ascendant, and thus it is the primary planet that signifies the body and physical vitality of the native in the chart. Having the ruler of the ascendant "maltreated" in this way does not bode well for the longevity of the native, and it indicates the potential for serious physical harm at various points when the configuration is activated. On the other hand, the maltreatment of Mercury by Saturn also hampers the native's inherent gifts at oration in some way. According to the 1st century astrologer Teucer of Babylon, when Saturn is contrary to the sect and in a succedent place⁷⁶⁷ it has the potential of being

... injurious, and bringing dangers from powerful and elderly persons through old and past transactions, and it brings [the native] into debts and prison and false accusations and guards and fetters and unshorn hair and banishments, and chronic misfortunes and poisonings, or fluxes and chills and nervous illnesses and lingering illnesses, or illnesses in hidden parts [of the body].⁷⁶⁸

Since Saturn is located in the 11th house, the source of many of the native's most severe misfortunes would ultimately come from his friends, alliances,

⁷⁶⁴ Note by D.K.: Virgo is the domicile of Mercury. As the Lot of Spirit is in Virgo, too, it is ruled by Mercury.

⁷⁶⁵ Note by D.K.: The chart is ruled by the sect of the Moon. Saturn belongs to the opposite sect, the sect of the Sun. This is very inauspicious.

⁷⁶⁶ For a definition of *kakosis* see Porphyry, *Introduction to the Apotelesmatika of Ptolemy*, Ch. 28, edited by Aemilia Boer and Stephen Weinstock, *Catalogus Codicorum Astrologorum Graecorum* [henceforth CCAG], vol. 5, part 4, Brussels, 1940, pgs. 186-228.

⁷⁶⁷ Note by D.K.: vide footnote 757 on pp. 425f.

⁷⁶⁸ Teucer of Babylon, via Rhetorius's *Compendium*, edited in CCAG, vol. 7, p. 215: 15-22, translation from James Holden, *Rhetorius the Egyptian*, American Federation of Astrologers, Tempe, AZ, 2009, p. 196.

or social groups he is a part of, including the above stated afflictions to Mercury and the Sun.

According to the trigon lords of the sect light technique mentioned earlier, there would have been two very distinct phases in the native's life – the first ruled by Mercury in Virgo in the 2^{nd} house, and the second ruled by Saturn in Gemini in the 11^{th} . Valens tells us that the changeover between these two periods can be timed by using the planetary period or the ascensional time of the sign that the weaker of the two trigon lords is in.⁷⁶⁹ Since both planets are in succedent places, the determining factor would have to be the sign placement, in which case Mercury is clearly stronger since he is in his own domicile, and thus Saturn would time the changeover. Accordingly, the native would have made a definite shift into the second phase of his life either sometime around the age of 28/29, which is the ascensional time of Saturn.

This second part of the native's life would be the period in which he would achieve the most eminence and political or social influence according to Valens, based on his usage of two lots called the Lot of Exaltation and the Lot of Basis.⁷⁷⁰ The lots of Exaltation and Basis are both poorly placed in the natal chart, being in the succedent and cadent signs Pisces and Libra⁷⁷¹, respectively. However, both of their domicile lords are very well-placed, being the angular benefic planets Jupiter and Venus, which are both on the ascendant and making a heliacal rising. Within the context of this technique the lots indicate the first part of the native's life, while the domicile lords of these lots indicate the second part of the life. According to this consideration it would appear that the native would become notable in the second part of his life.

Additional confirmation of this is provided by the second time-lord technique outlined by Valens in book 4 of his *Anthology*.⁷⁷² The technique was not given a name by Valens, although it is known in contemporary discussions as Zodiacal Releasing. It was used by Valens in order to divide the native's life into broad periods or chapters, which could then be used in order to study their actions and eminence. If this particular native was born with late Leo rising and the Lot of Fortune in Leo and the Lot of Spirit in Virgo, then according to the Zodiacal Releasing from the Lot of Spirit technique he would have reached the peak of his career and eminence between the ages of 28 and 43, or roughly from the year 27 CE until the year 42 CE.

⁷⁶⁹ Valens, Anthology, Book 2, Ch. 2: 6-7.

⁷⁷⁰ For the Lot of Exaltation see Valens, *Anthology*, Book 2, Ch. 19. For the Lot of Basis see Valens, *Anthology*, Book 2, Ch. 23. Valens demonstrates the usage of those two lots with example charts in chapters 22 and 27.

 $^{^{771}}$ Note by D.K.: vide footnote 757 on pp. 425f. In our chart, Pisces corresponds to the succedent 8^{th} house, Libra to the cadent 3^{rd} house.

⁷⁷² Valens, *Anthology*, Book 4, Chs. 4-10.

To summarize, the owner of this chart would be someone who would not have been in the upper class by societal standards, but he would not have been a beggar either. Instead he would fall somewhere in the middle class. He would have been deeply concerned with financial or material matters throughout the course of his life. Interestingly, he would have been a somewhat jovial character who was fond of making jokes, although he could also be rather cutting in making his points at times, not hesitating to sever his ties with existing social norms. Finally, he would suffer hardships as a result of friends or groups that he was associated with.

To recap some additional points about the owner of this chart:

- He had a particularly striking and appealing physical appearance (Venus making an appearance in the 1st).
- He would appear to be rather knowledgeable and wise, with a particularly philosophical demeanor (Jupiter making an appearance in the 1st).
- He would be rather assertive and forthright in expressing his opinions (Mars in the 1st, of the sect in favor), particularly in matters of philosophy or religion (Mars ruling the 9th), as well as perhaps in matters pertaining to his homeland (Mars ruling the 4th).
- He would have a regal character (with the ascendant and the abovementioned planets in Leo), although he would maintain a certain degree of modesty (ruler of the ascendant in Virgo).
- He would have a deep lifelong concern with issues pertaining to money, possessions and livelihood (ruler of the 1st in the 2nd).
- He would probably support himself eventually through some sort of inherent oratorical skills (Mercury in Virgo in the 2nd, ruling the Lot of Spirit).
- At various points in his life he would encounter serious difficulties and hardships as a result of his friends or social groups that he was a part of (Saturn in the 11th), and this would have a negative impact on both his health (Saturn afflicting the ruler of the ascendant⁷⁷³) and perhaps his ability to express his thoughts and opinions (Saturn afflicting Mercury).
- His life would have been divided into two distinct phases, and the shift to the second phase of his life would have occurred sometime around the age of 28-30 (activation of Saturn as the 2nd trigon lord by ascensional time or planetary period).
- He may have become somewhat eminent in the 2nd part of his life (the rulers of the Lots of Exaltation and Basis being on the ascendant).

⁷⁷³ Note by D.K.: the Sun.

The period in which he would have been able to actualize his potential to its fullest would have occurred between the ages of 28 and 43, roughly (reaches a peak period or angular sign⁷⁷⁴ from the Lot of Fortune in Zodiacal Releasing from the Lot of Spirit).

While the picture that this presents us is in some ways in keeping with what is known of Jesus' life, in other ways it would force us to change our conceptions of him somewhat, if indeed this is the correct chart. The fact that Venus and Jupiter both make a heliacal rising within seven days of his birth would have been seen as particularly important to a group of astrologers during this time period, especially since both planets are within the exact 15 degree range that was used as the standard in the Hellenistic tradition.⁷⁷⁵ The fact that the two 'benefics' or 'good-doers' were making such a dramatic appearance at the same time in the sign of the zodiac that is commonly associated with kingship and royalty may very well have been interpreted by a group of astrologers at the time that a sort of beneficent leader had been born, and the association of both planets with priesthood in the Hellenistic tradition could very well have prompted them to view this as a sort of religious leader.

Hellenistic Chart Reading by Rafael Gil Brand

Introduction

The following text represents an attempt to interpret the hypothetical birth chart of Jesus of Nazareth in the way that an astrologer of that time might have done without knowing the native. In doing this, I have relied heavily on the wording of classical texts, particularly the textbooks of Vettius Valens, Dorotheus of Sidon, Claudius Ptolemy, Firmicus Maternus and Paulus Alexandrinus. Large sections of the interpretations are compiled from quotations taken from these works.

I have tried to write as "objective" an analysis as possible, as though I did not know whose birth chart this could possibly be. For this reason, I have also included aspects which we normally do not associate with the figure of Jesus, such as marriage and children. However, my neutral treatment of the subject has probably only succeeded in part.

Can I confirm from an astrological point of view that this birth chart could be that of Jesus of Nazareth? The reader will surely notice that in part there is a truly striking correlation with his life and work. However, there

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⁷⁷⁴ Note by D.K.: vide footnote 757 on pp. 425f

⁷⁷⁵ See Porphyry, *Introduction*, Ch. 2; Paul of Alexandria, *Introduction*, Ch. 14, edited in *Pauli Alexandrini Elementa Apotelesmatica*, ed. Emilie Boer, B. G. Teubner, Leipzig, 1958.

are also aspects that are less "compatible". Especially the position of the luminaries – Sun and Moon – seem to me to be too weak in this natal configuration in order to astrologically account for such a personality and the force of its influence. And although in the horoscope there are clear references to the themes of religion and spirituality, they could certainly be more incisive.

Thus I could not avoid conjecturing on where the ascendant could have stood – keeping to the postulated date, of course – in order to better coincide with the traditional personality of Jesus. The most plausible solution would be an ascendant in Sagittarius. The prominent positions of Jupiter and Venus would then be in the 9th house of Religion, and the Sun as its ruler in the 10th house of the Public World.

However, this would merely be an alignment of the horoscope to my own view of Jesus. It could also be argued that the prominence attested by such a horoscope was simply not given according to mere worldly criteria. For readers interested in these speculations about the Jesus horoscope, I have pointed out some conspicuous features that would have emerged with a Sagittarius ascendant. Nevertheless, many of the interpretations presented in the text would not be significantly changed. This is also due to the fact that Hellenistic astrology largely worked with the natural meanings of the planets, and their rule over the houses did not play as central a role as it did in Arabic and Indian classical times.

The approach used in the following analysis is essentially different from that used by modern astrologers. When beginning an interpretation in ancient times, it was usual to determine or confirm the natal ascendant, and then to calculate the life expectancy of the native, or the child's chances of survival. Only then would they start a reading of personal traits. I have followed this approach here. The footnotes supply short explanations about the techniques I have used. A more detailed discussion would go far beyond the scope of the present work.

There would surely have been other themes in the life of the native that could have been discussed. However, in order not to make my interpretation too long I have concentrated on the areas that – in view of the proposed owner of the horoscope – appeared to me most interesting. That applies especially to the death of the native. I have also kept to a style that achieves a pure interpretation of the chart reading. Thus I have not tried to give advice or anything like it, as any astrologer surely would have done in a real case scenario in those days. Instead I explain repeatedly how I arrived at my interpretation so that the text resembles an object lesson.

The horoscope I am interpreting has been calculated with the Babylonian (sidereal) zodiac that was commonly used by many Hellenistic astrologers like Vettius Valens or Dorotheus of Sidon. The tropical zodiac differs by a mere 3°07'. The house system used is the one of whole sign houses. The

whole sign in which the ascendant is positioned is counted as the 1st house, the next sign as the second, and so on. The original system was commonly used during all of the Hellenistic and Roman eras.

Nativity on 1 September 2 BCE at 4:30 a.m. in Bethlehem, Palestine (4:24 a.m. after correction)

Verification of the ascendant

First, I check precisely where the ascendant of the birth was positioned. If I follow the rule of Petosiris⁷⁷⁶, according to which the birth ascendant is positioned on the Moon of conception or opposite it, and the Moon of the birth on the ascendant of the conception, the probable date and time of conception is 13 December 3 BCE at 1:01 a.m. At that time the Moon was at 24°03' Aquarius, and this results in a birth ascendant in the same degree in the sign of Leo.

It is also said that one of those planets that rule in the degree of the prenatal new moon marks the ascendant or midheaven. The new moon before the birth occurred at 6°09' Virgo in the house and within the boundary of Mercury and in the triplicity of the Moon. However, it seems that neither body indicates the ascendant or the midheaven as their positions are much far too far away. But the ruler of the sign of the natal Moon, Venus, which at the same time is the day ruler in the trigon of Virgo, and on the day of the nativity had its heliacal rising, will mark the time of birth⁷⁷⁷. This results in an ascendant in the 23^{rd} degree of Leo. If we compare both results, we obtain the 24^{th} degree of Leo as ascendant, in the boundary of Mercury.

Quality of life and life expectancy

As it is a night birth, I locate the Moon and this is positioned in the air triplicity. Mercury⁷⁷⁸ is the first ruler of this triplicity. Although Mercury is situated in his own sign, he is combust in the 2nd house and violated by Saturn, indicating that the beginning of his life will be marked by privations and dangers and he will have to overcome great obstacles. This situation will prevail during the first 20 years, the years of Mercury⁷⁷⁹. And later he

⁷⁷⁶ The Scales of Hermes are meant here. This name only became current during the Middle Ages. The earliest knowledge we have of this technique comes from quotes from the works of Nechepso and Petosiris.

⁷⁷⁷ This assignment would be more explicit for a day-time birth as Venus becomes the first triplicity ruler during the day. The second triplicity ruler would then be the Moon.

⁷⁷⁸ The air trigon – Libra, Aquarius, Gemini – is ruled by Mercury during the night and by Saturn during the day. Saturn becomes the second ruler of this triplicity during the night.

⁷⁷⁹ The concept of planetary years was very important in Hellenistic astrology in order to determine the time at which certain configurations "ripened". This system
will draw hope and will be able to better put his purposes into practice, when Saturn takes over the rule in the 11th house.

The Moon and the Sun are averted from the ascendant or in a cadent house, as are the Lot of Fortune and the prenatal new moon⁷⁸⁰. The ascendant is thus to be seen as Apheta⁷⁸¹, which is occupied by Jupiter, the ruler of its triplicity⁷⁸². Jupiter in this position would give him numerous years (79), but it is still under the rays of, and is positioned near, Mars. For this reason the life expectancy is reduced to a maximum of 64 years⁷⁸³.

However, if we follow the teachings of Vettius Valens and other astrologers, the Sun has to be regarded as Apheta⁷⁸⁴ because of its position close to the horizon and in the first field⁷⁸⁵. It is positioned with its ruler Mercury, which, according to this view, is also situated in a cardinal house and can

differentiates high, low and middle years of the planets. Above all, the first two figures are important. The following is an overview of the years of the planets:

0	1	U	2
		low years	high years
Sun		19	120
Moon		25	108
Mercury		20	76
Venus		8	82
Mars		15	66
Jupiter		12	79
Saturn		30	57

 780 The "averted houses" are the 2nd, 6th, 8th, and 12th houses, beginning from the sign of the ascendant (or another factor from which counting may start). The cadent houses are the 3rd, 6th, 9th and 12th houses.

⁷⁸¹ Apheta is the Greek word for *hyleg*. These terms indicate the life-giving factor of the horoscope by which the length of life and the most important life-crises were inferred. Sun, Moon, Lot of Fortune, the prenatal new or full moon or the ascendant could be the Apheta.

⁷⁸² The fire trigon is ruled by Jupiter during the night, and secondly by the Sun.

⁷⁸³ As Mars is a so-called malefic, its low years, i.e. 15, are deducted. Venus is retrograde and—according to Paulus Alexandrinus—because of that there are no additional years.

⁷⁸⁴ With an ascendant in Scorpio or in Sagittarius, the Sun's function as Apheta would be clearer if it were based on the system of whole sign houses.

⁷⁸⁵ In connection with the theory of the Apheta and the calculation of lifespan: Vettius Valens, Claudius Ptolemy, and several other authors introduced the house system which later became known as the Porphyry domification. According to this system, the arc between midheaven and the ascendant and the arc between the ascendant and lower midheaven are divided by three. Apparently, this system was utilized for the calculation of the hyleg. However, for the actual interpretation of the natal configuration the system of the whole sign houses was always used. That is why I prefer to use the term "field" here in order to differentiate the sections of the Porphyry system from the actual houses (=signs).

thus give his high value of 76 years. However, these years are reduced by the square of Saturn and the conjunction of the Sun, and thus a crisis is to be expected not far from the 27th year⁷⁸⁶. A short life is also indicated by the ruler of the ascendant Sun (Mercury) in square to Saturn.

Critical periods

In the 30th to 31st year of his life, the Sun reaches the trine to Saturn⁷⁸⁷, and in this time he will have to overcome great obstacles, disease and enmity, and death will be close to him. However, as Saturn is in trine and in the 11th house, the native may be able to overcome the crisis. Then, in the 32nd to 33rd year, follows Saturn's conjunction with the Moon and here his end is to be feared, for the years of his life promised by Mercury have been used up and no benefic is in aspect here. In turn, the ascendant reaches the boundary of Mars in the 33rd year and this, too, indicates the threat of injuries and dangers.

After the first year of his life the ascendant moves—while still in Leo—to within the boundary of Mars, and reaches it in the seventh year. Yet the threat to his life is shattered by the presence of Jupiter. Also during the 15th year, when the ascendant reaches the square of Saturn, one has to anticipate great oppression and disease, but the closeness of Mercury in its own sign will help him to overcome this crisis.

The signs of death in early life are removed by the ascending positions of the great benefics Jupiter and Venus, which give great fame and fortune and guarantee that the child will grow up and thrive in spite of all obstacles.

Personal traits

These acending planets bestow on the native much grace and beauty, and a dignified bearing coupled with a certain gentleness. His eyes will be rather dark and lovely, but due to Mars and the sign of Leo his gaze will be keen and open in spite of all the charm. Jupiter will bestow good growth on his beard. His skin will be lustrous, his hair reddish and well-groomed, his body rather strong, with a broad, hairy chest and fairly lean legs, but altogether—due to Venus—well proportioned.

⁷⁸⁶ The low years of Saturn are 30 and those of the Sun 19. Subtracted from 79, that makes 27. As Mercury is situated in its own sign, the lifespan could be slightly prolonged.

 $^{^{787}}$ This is the old technique of directions. The classic time key for this technique amounts to $1^{\circ} = 1$ year. If one uses proportional rising times for the Sun as Ptolemy suggests (and this later became common practice), one arrives at releases a year and a half earlier than if one uses the true rising times at the place of birth. However, this last alternative was propagated by some authors, such a Vettius Valens. Here I have deliberately used wording that is somewhat imprecise and more or less includes the results according to both techniques.

The sign of Leo bestows on him a noble and open-hearted character and good manners. He will love women, be firm in his opinions and keep his word, but will also easily expose himself to dangers, the more so as Mars also occupies the sign.

The ascendant stands in the radiant degrees of the third decan⁷⁸⁸, and this bestows sober-mindedness, education, and great popularity on the native. However, it also augurs injuries and royal conflicts and mighty conspiracies against him. When he later overcomes them, he will become rich and do well in business in the name of the gods, and women will favour him. But he will be injured in his hands and feet and will be honoured at his grave.

The boundary of the ascendant is ruled by Mercury⁷⁸⁹, and Venus is positioned in this boundary. The boundary of Mercury imparts to him knowledge of secret teachings, popularity, skill in legal matters, and gives him a keen mind. He will distinguish himself by his good manners and his wisdom, and he will strive to help other people. Because of Venus' position, he could become a divine poet or an excellent speaker whose discourses posterity will value and preserve. Because of his simple mode of expression he will easily be able to persuade is listeners in any direction he wants.

The conjunction of Venus with Jupiter and Mars on the eastern horizon will make the native seek the company of others and make him very popular. He will be looked upon as someone who is worthy to associate with the powerful, and women especially and those belonging to temples will promote him. The connection of Venus and Jupiter makes him gracious and devout. He will love people and want the best for them. Perhaps he is of priestly lineage or will preside over priests. He will also seek fame and honour and will know how to please the crowds.

However, Mars will also make his life unsettled. Connected to Jupiter, it will bestow on the native great zeal, especially in religious matters, because Mars rules the 9th house. And thus it could be that he will accomplish his deeds with great courage and confidence, but in spite of that he will not be spared betrayal and disgrace. For even if Jupiter and Mars can bestow power and authority over countries and cities, the square of Saturn to the Sun augurs the loss of honour and esteem, the destruction of his prominence and his aims, and even the danger of being rejected by his country⁷⁹⁰.

⁷⁸⁸ The following paragraph has been taken from the text by Hephaestion of Thebes almost literally.

 $^{^{789}}$ The boundary of Mercury stretches from 18° to 24° Leo.

⁷⁹⁰ With an ascendant in Leo, the Sun – as important as it is for this ascendant – appears in quite a weak position. An ascendant in Scorpio or especially Sagittarius would indicate a strong position in society and broad public appeal far more, however, without reversing the dangers due to Saturn.

Since at time of his birth the bright star in Leo's⁷⁹¹ tail is rising—which has the character of Saturn with Venus—the native will be well known and passionate, with a certain inclination to speak and act in a shocking manner, but this will be tempered by Jupiter. But especially later in life this star augurs participation in priestly duties and honour for his religious practices and his self control; and he may be very knowledgeable in secret teachings⁷⁹², for this is confirmed by other configurations of the nativity.

Psychological-spiritual traits

In order to better understand the traits of his soul, we shall now have to supplement the outlined character dispositions with the positioning of the Moon and of Mercury. The Moon in the sign of Libra bestows a democratic disposition, flexibility, inventiveness, easy contact with people, and an interest in politics. The Moon is positioned on the boundary of Mercury which is situated in its own sign and its own boundary. And thus this position of Mercury with the Sun in Virgo bestows a sharp mind, humility and curiosity, and a versatile, many-layered and multi-faceted spirit. He will be eager to learn and to be initiated in occult knowledge, especially as Mercury is situated under the rays of the Sun and thus disposes him towards everything secret, as well as an interest in philosophy, alchemy or prophecy. His character may also be somewhat unstable and he may avoid exertion as Mercury is combust by the Sun. On the other hand, Venus rising and Mercury in his domicile strengthen openness and the power of spiritual traits which overcome uncertainties and spiritual weaknesses.

The Moon as well as Mercury are closely aspected by Saturn which is positioned in a favourable house and sign. The influence of Saturn on the spiritual traits cause the native to be a deep thinker who can be strict and rigid in his thinking and be single-minded in wanting to reach his goals. This aspect could also make him jealous and acquisitive if there were not the dominant position of Jupiter and Venus in the ascendant. Saturn's position in the ruling area of Mercury makes him into an able administrator, a good interpreter of the law, one who probes into customs, and possibly into a mystic who takes part in secret rites, performs miracles, and is interested in medical matters⁷⁹³. He will have an unerring and practical disposition but will also be able to deceive and to hoodwink in order to advance himself.

Danger for body and soul

The Moon is just separating from the trine of Saturn and thus grief and separations will occupy him, and he will move about but will be able to profit

⁷⁹¹ Denebola, β Leonis.

⁷⁹² All this can be read in the anonymous Treatise on Fixed Stars of 379 CE.

⁷⁹³ That is approximately what Ptolemy says about the configuration of Mercury with Saturn ("On the quality of the Soul", *Tetrabiblos*, book 3, ch. 13).

from traveling and the blows fate deals him. As the Moon in Libra still reaches the sextile of Venus which rules this sign, in time he will be able to gain power and become influential. And because the Moon is situated in the 3rd house and dominant Venus rules this house, his siblings or cousins will occupy important positions in his life and he will be promoted by them.

Saturn violates Mercury through its square aspect and this also means suffering and affliction for the native. Many plans and ideas can occur to him but they can only be put into practice with difficulty and effort. At worst he can become dumb or deaf, but at the least he will remain silent and keep his secrets, and there is the danger that he may be troubled by melancholy moods and his spirit is darkened. As this aspect also affects the Sun, and Saturn rules the 6th and 7th house, he will meet much enmity and betrayal during his life, up to the point that he will be despised and rejected or will be imprisoned. He could also be afflicted by cold diseases if he does not take preventative measures.

Parentage and means of subsistence

The same aspects signify that his parents and especially his father will lose esteem and that earning their income is made difficult. Possibly the native will lose his inheritance and will have to repeatedly live in poverty⁷⁹⁴ even though Jupiter in the ascendant seems to assure him of the favour of friends and powerful people.

The parents of the native will be free people and the position of the ruler of the 4th house with Jupiter and Venus in Leo bears witness of a strong, possibly royal family and of great unity and harmony with his own parents. In spite of that, his father will suffer harm and probably die sooner than the mother as both Sun and Saturn⁷⁹⁵ are standing more violated than the Moon.

The Lot of Fortune, too, in its position on the dragon's tail⁷⁹⁶ and in the 12th house signifies a loss of wealth, or a detachment from any kind of possessions, but still this self-abandonment can give him authority and a great following because the Moon as ruler of the Lot of Fortune occupies the 3rd house. Reckoned from the Lot of Fortune this is the 4th house and thus it could be that he earns his living in connection with priestly functions and that he receives messages from god⁷⁹⁷. This is also confirmed by the position of Jupiter and Venus.

 $^{^{794}}$ This also results from the position of the Sun and Mercury in the $2^{\rm nd}$ house and the effect of Saturn.

⁷⁹⁵ The Sun is the general significator of the father, and is strongly violated here. However, at a night birth it is specifically Saturn which refers to the father.

⁷⁹⁶ Name of the descending lunar node, whereas the ascending lunar node is called "Dragon's Head". Eclipses occur at the two lunar nodes.

⁷⁹⁷ Thus the almost literal account of Valens, *Anthology*, book 2, ch. 13.

The 11th house of the Lot of Fortune, the Place of Gains, is positioned in an angular house of the nativity and its ruler Venus is connected to Jupiter. So it is not impossible that he will gain a fortune and will receive rich gifts from mighty ones, even though he will lose much of it or give it away. For he will be virtuous and a benefactor of other people.

Activities and influence

His natural authority is affirmed by Jupiter as ruler of the 5th house and with Mars in the ascendant. This position also promises strong faith and great blessings because Mars rules the 9th house. The native will become a prophet of the great god, and people will listen to him as to a god⁷⁹⁸.

The conjunction of these planets (Jupiter and ruler of the 9th house) with Venus, the ruler of the 10th house, leads one to assume that his activities and work are connected to religion, philosophy or mysticism and to holy rites in which the native will play an important part⁷⁹⁹. The strong position of Venus in its heliacal rising bears witness to the native having a strong influence on his environment and that this will make him loved and make him famous even though the association with Mars indicates controversies and perhaps even a violent end. The retrogradation of Venus and its eastern position point to the danger that the prospective royal or priestly position held out to the native will not be granted⁸⁰⁰.

The strong Venus connected to Jupiter indicates that the native will be granted high honour. This also points to an independent activity because Venus is situated in an angular house. His activities could be connected to fine arts, or to trade in wine or spices. But the connection with Jupiter and Mars also shows the possibility that he may earn his livelihood by serving in the temple or interpret omens, or that he practices medicine and handles drugs and remedies.

⁷⁹⁸ This is quoted verbatim from Vettius Valens, *Anthology*, book 2, ch. 8. In this, he refers to the position of benefics (thus primarily Jupiter and Venus) in the 9th house as rulers of the 1st house or the Lot of Fortune. In this case, the ruler of the 9th house is situated in the 1st and connected to both the benefics, – moreover, one of them is also the ruler of the 9th house of the Lot of Fortune – and that is why I take the liberty of extending my interpretation to this comparable position. Incidentally, the configuration described by Valens would have been given accurately if the ascendant had been in Sagittarius.

⁷⁹⁹ In connection with certain planets in the 9th house, amongst them Jupiter, Paulus Alexandrinus puts it similarly. Here, too, the converse situation is the case, that the ruler of the 9th house is connected to Jupiter. It seems permissible to adopt this interpretation in connection with other configurations.

⁸⁰⁰ The fairly negative interpretation of Paulus Alexandrinus of retrograde Venus in 10th house (here as ruler of the 10th house in the equally powerful 1st house) may sound somewhat strange. I include it here nonetheless (as against that, Venus as evening star is interpreted very positively).

Venus is a spear bearer of the Sun, as is Jupiter, for it will rise heliacally within the next seven days. And because these planets are positioned in an angular house but the Sun is in the 2^{nd} house, it can be expected that the native will hold a leadership position in the area of politics or society, even though he will be denied the highest rank⁸⁰¹. Not only that, but Jupiter rules the exaltation of the nativity⁸⁰² in this favourable and prominent position, and this counts as a sign of royal dignity.

Finally, the eye of Taurus, one of the brightest and most significant stars in the sky⁸⁰³, culminates at the birth. This contributes to making the native brilliantly outstanding, wealthy, highly esteemed, and honoured by those around him, but also hot-blooded and passionate with regard to his public activities, for the star has the nature of Venus and especially of Mars. The culmination of the red eye of Aries can bestow a high position coupled to the danger of a tragic end.

Marriage and children

Venus together with Jupiter in the 1st house suggest a good marriage and mutual liking with his partner, or great benefits from women. As these two planets are in a fixed sign, and the Lot of Marriage⁸⁰⁴ falls within the sign of Leo, he will probably only be married once.

The combination of Mars and Venus in the same sign makes him passionate but his desires are tempered by Jupiter and thus it may save him from adultery or accusations thereof. Saturn faces the rising sign in the superior sextile and thus he may restrain his passion through asceticism. It may

⁸⁰¹ According to classic theory, this would be the case even if the luminaries or at least the ruling luminary (Sun during the day, Moon during the night) were also situated in an angular position. With an ascendant in Sagittarius we would have the Sun in the angular house; however, the spear bearers would then be in the cadent, but still auspicious house.

⁸⁰² The exaltation of the nativity is a point calculated by Vettius Valens. During the day, the arc of the Sun up to its exaltation is added to the ascendant, during the night the Moon's arc up to its exaltation. In this horoscope it is 20° Pisces. Incidentally, that is almost precisely the position of the previous Jupiter-Saturn conjunction in the year 7 BCE.

⁸⁰³ In Babylonian astrology, Aldebaran was seen as one of the central fixed stars as it was an anchor point of the sidereal zodiac. This significance is also confirmed by the Anonymus of 379. Its position in the zodiac is exactly 15° Taurus, but on the latitude of Bethlehem it culminates together with the MC (midheaven) on $16^{\circ}47'$ of this sign. This definitely is within the orb of the natal midheaven, which is at almost 19° Taurus.

⁸⁰⁴ For this point, different calculations have been handed down. Here, I follow the two points identified by Vettius Valens. One is formed by Venus with Jupiter, the other (in case of a male) with the Sun and Venus.

promise the native commerce with inferiors or older women, as Saturn rules the 7th house of marriage. However, because of the simultaneous presence of Jupiter, it can rather be assumed that the native will associate with powerful women.

Sun as ruler of the Lot of Marriage and together with the Lot of Spirit⁸⁰⁵ also promises a good partnership, but these planets are violated by Saturn and thus it may be that grief and misfortune will result from the alliance⁸⁰⁶.

As the 5th house is aspected by Saturn, and its ruler together with Venus is situated in an unfruitful sign, it is to be expected that the native will have only a few children or even remain childless. Then, too, the connection of Jupiter and Venus with Mars, as well as Saturn aspecting Mercury, can be a cause of childlessness or loss of children.

The kind of death

Finally, I want to discuss the possible circumstances of death, as the native may not be granted a long life.

Because of the position of Jupiter, the ruler of the 8th house, in conjunction with the malefic Mars, the possibility of an unnatural or even violent death is indicated, the more so since Venus is also nearby, and Jupiter and Venus are planets that can be significators of death for each other⁸⁰⁷. Jupiter's location in Leo can be a sign of danger from wild animals, while his rising position in conjunction with the ruler of the 10th house (Venus) portends death in public.

Saturn, the ruler of the house of Death seen from the Lot of Fortune, sends its square to the Sun, the prenatal new moon, and their dispositor Mercury. And as Saturn is located in a human sign, and also the Moon, which functions as anareta for the native⁸⁰⁸, it cannot be excluded that he will die by the hands of men.

If one counts the signs from the Moon to the 8th house and adds the position of Saturn, then Scorpio and with it Mars become further indicators of

⁸⁰⁵ The Lot of Spirit is situated in 22° Virgo, and is thus ruled by Mercury.

⁸⁰⁶ According to classical opinion, this horoscope does not indicate an unmarried state. If the ascendant had been Sagittarius this would have been more probable because in that case Saturn would have occupied the 7th house and violated the ruler of the 7th house, while Venus and Jupiter would not have the prominent position they have here.

⁸⁰⁷ Jupiter is the ruler of the 8th house, counting from Taurus, the main domicile of Venus, and Venus is ruler of the 8th house, counting from Pisces, one of Jupiter's domiciles. Vettius Valens regards this relationship of the planets to one another as relevant in view of the connection with an unnatural death.

⁸⁰⁸ As shown at the beginning, per direction, the Sun reaches the position of the Moon, which can be a killing planet (anareta) according to classic theory.

death⁸⁰⁹. The connection of Mars and Jupiter – ruler of the 8th house – in the royal house of Leo could indicate that death is due to a sentence by generals or kings⁸¹⁰. As Saturn is positioned east of the Sun and Mars is moving towards its eastern rising, the cause of death will probably be due to injury rather than to disease.

Last crisis

I have already mentioned the crisis that is shown for the 32^{nd} or 33^{rd} year. If we investigate this period of life a little more closely, we see that the malefics as Rulers of Times are particularly active. Seen from the Lot of Fortune, the sign of Leo is active from the 26^{th} year⁸¹¹ onwards, and this leads one to expect that the native will develop his activities and his work and that he will receive fame and honour because here the strongest planets are involved. But from November 30 CE the sub-phase of Saturn is active which violates the main phase (Sun), and thus the destruction of his reputation, enmity, and imprisonment are to be feared. If we apply the technique of planetary phases⁸¹² as taught by Vettius Valens, we also see the beginning of a Saturn phase and sub-phase at $32^{1/4}$ years.

 $^{^{809}}$ Dorotheus, who is the first to advance this rule, speaks of signs, and does not call them "lots". Later Arab authors regard it as "lot" and used the position of the Moon and the cusp of the 8th house in their calculations. In the system of whole sign houses, the degree of the ascendant in the 8th house or the beginning of the sign would then have to be taken as position. Irrespective of how one calculates it – in our case we arrive at the sign of Scorpio.

⁸¹⁰ The configurations named can be indicative of violent death. Nevertheless, none of the "typical" aphorisms about such a death are completely given here, let alone the configurations found in Ptolemy and Dorotheus which are to indicate death by crucifixion. Only if Mars had advanced a little and was already positioned in the sign of the Sun, such a configuration would be met at least partially. With an ascendant in Sagittarius, indications of a violent death would be somewhat plainer, especially as the conjunction of Mars, Jupiter and Venus would be situated in the 8th house of the Lot of Fortune, and the ruler of this sign (Sun) would be violated by Saturn in the 7th house. In addition, the Moon would be an even clearer anareta, because it would then be ruler of the 8th house, and would underline death by human agency in the sign of Libra.

⁸¹¹ According to this technique, which Vettius Valens has dealt with in detail, each sign is allocated the years of the planet ruling it, starting from the Point of Fortune. In analogy, these phases are divided into sub-phases whose length is counted in months instead of years. As the Point of Fortune is positioned in the sign of Cancer, the first 25 years are accordingly ruled by Cancer and the Moon.

 $^{^{812}}$ This technique utilizes a quarter of the low years of a planet as a phase of time, starting with the planet immediately preceding the prenatal new or full moon position. After that, the sequence is that of the planets in the natal chart. The second round begins at $32\frac{1}{4}$ years, but then starts with the fourth planet in the natal chart.

If we count the years from the ascendant, the 32^{nd} year must be regarded as critical, for Pisces, where the counting ends⁸¹³, is in opposition to the prenatal new moon and is squared by Saturn – both at the birth and in transit. Also in the 33^{rd} year enmity, injury and betrayal must be feared, for the year falls in Aries which is ruled by Mars and squares the axis of the lunar nodes. But above all, during that year this sign is transited by the dragon's head, while Saturn enters the sign of Cancer in June 31 CE, where the lunar node and Lot of Fortune of the birth are positioned. If we count the years starting from the Moon, we arrive at the sign of Gemini near Saturn itself, which again squares the Moon. And so this becomes a year full of danger, and there is the threat of grief and imprisonment⁸¹⁴.

In April 32 CE the square of Saturn to the Moon and to the directed Sun becomes exact, and at the same time the Sun transits through Aries where the Dragon's Head is situated. And as the transit of the nodes breaks the strength of the sign and its ruler, and in this month the Sun activates the square of Saturn in cadent houses, one has to count on physical weakening, hidden enmity, and sudden dangers during this time⁸¹⁵.

And if the native were to overcome these dangers to body and life, a longer life might be granted to him, for it will take at least another 20 years before a similar crisis will occur.

⁸¹³ This is a technique which later became known as *profection*. Each sign counts for one year. In the year 31 CE, the native was in his 32^{nd} year (up to the 1^{st} September). Subtracting 24 (2x12 signs) this adds up to eight signs, thus the 8^{th} house (Pisces), counting from the ascendant.

⁸¹⁴ With an ascendant in Sagittarius, this transit of Saturn would touch the 8th house and its ruler directly, while Saturn is still released by the Moon. Leo would be activated from the ascendant and this indicates danger as well, but also concentrated activity and strong public influence (planets in Leo, Sun in the 10th house).

⁸¹⁵ From an astrological point of view it is significant that at full moon in April (Easter) in the year 32 CE an eclipse of the Moon took place which, however, would not have been visible in Palestine. Yet one may assume that astrologers of the time would have known that this eclipse would have been visible in other parts of the world.

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