

Correspondence

Dear Sir,

I should be grateful for the opportunity to comment on Professor Colin Humphreys' article, 'The Star of Bethlehem', published in 'Science and Christian Belief' Volume 5 (2) October 1993.

The evidence produced by Professor Humphreys is interesting and his line of argument persuasive, but my own concern is with the relationship between this singular astronomical event and the general character of the Matthean narrative, chapter 2, verses 1–12. Professor Humphreys clearly treats the birth narratives of both Matthew and Luke as historical and asserts that they 'are complementary and easily reconcilable' (page 98). I shall confine my own remarks to Matthew 2:1–12.

(1) Matthew does not call the star a comet, or 'hairy' star. If the star were a comet then this omission is surprising in view of the striking appearance of a comet and its difference from an ordinary star. Furthermore, explicit reference to it as a comet would have emphasized its exceptional character, a point which is of central significance for the whole narrative. If we identify Matthew's star with a comet, therefore, this must be a piece of guesswork, however plausible.

(2) The Magi apparently saw the star in the East and then saw it no more until they left Herod in order to go to Bethlehem. The tense of the Greek verbs for 'we saw' (verse 2) and 'which they saw/had seen' (verse 9) implies a single event in the past and not an event which started and continued. If the star had continued to move across the sky and therefore been visible during the Magi's journey to Jerusalem they would not simply have used the past tense *eidomen* but would have appealed to the striking evidence there for all to see in the southern sky. This casts serious doubt on the literal identification of the 5 B.C. comet with Matthew's star.

The Evangelist also explicitly links the appearance of the star after the departure from Herod with the experience of almost inexpressible joy on the part of the Magi. To say that they rejoiced in this fashion when they saw the star is hardly consistent with their having seen it continuously throughout their journey, and this view is confirmed by the words which open this part of the story, 'And behold, the star which they had seen (*eidon*) in the East . . .'

(3) At this second time of appearing the star led the Magi to the place where Jesus was living with Mary and Joseph. The place 'where the child was' was indicated by the position of the star 'above' or 'over' (*epano*) it.

We could certainly imagine the star shining brightly over the town as confirmation of the fulfilment of prophecy and an assurance that the information given by Herod was correct; and it is true that a few inquiries would have brought the Magi to the right dwelling. This, however, is not what Matthew says. We are told that the Magi made inquiries in Jerusalem, but there is no reference to such inquiries in Bethlehem. After telling us

that the star stood over 'where the child was' and recording the joy of the Magi, he continues, 'And coming into the house they saw . . .' The word 'house' is obviously a more precise indication of the place indicated by 'where'. The star was therefore in very close proximity to Jesus's home, just above the roof. That is to say, it was a miracle and no ordinary star, planet or comet.

(4) Professor Humphreys lays down a general principle at the very opening of his article: 'The question of whether a celestial phenomenon reported in ancient literature in an historical context was a real astronomical object is one which occurs quite frequently. In all such cases it seems best to consider as a working hypothesis that the report is correct, and to investigate whether any astronomical phenomenon exists which fits the report' (page 83).

This principle may well be very fruitful and in the present instance has produced most interesting information about celestial phenomena around the time of Jesus's birth. This intellectual enterprise, however, is what one might call a 'naturalistic' one. The assumption is that we are dealing with historical literature, that is, descriptions of events which were observable by anyone in the right place at the right time; and events which occurred as the result of human choice or as part of nature's ongoing processes. If the literature is not historical either in its general character or with respect to a particular detail or details, our research may still prove useful but relevance to the interpretation of the literature may not be simple or straightforward. It may also raise fundamental questions which carry us into the realms of metaphysics. Above all we must be careful to note what the author tells us, and if we prefer our own historical reconstructions to what we find in the text we must be fully conscious that this is what we are doing.

(5) In the present instance St Matthew states that God intervened in the affairs of men through the miraculous birth of the Messiah; and the star in the narrative is a miracle in the natural world corresponding to and signalling the occurrence of the profounder miracle in the human. The star seen by the Magi was apparently not seen by anyone else, and certainly not by Herod and his agents since otherwise they too would have followed it and carried out their appalling murder without waiting for foreigners to tell them what they could easily find out for themselves. The star therefore as described in St Matthew's narrative lies as much beyond the reach of scientific investigation as the Incarnation.

(6) The alternative to taking this narrative as a literally historical one is to recognise its legendary character. A legend is a work of the imagination related to an historical situation or historical events, and designed to bring out what the author believes to be the true or main significance of the historical facts: meaning by 'historical facts' what we should have seen and heard if we had been there at the time. If Matthew 2:1-12 is a legend, what interpretation of events was the Evangelist endeavouring to put across?

The answer to this is as follows: Pagans operating with superstitious

astrological practices revealed truth from God, whereas representatives of the Jewish Church with trust from God revealed to them in the open Scriptures could only pervert that truth by aiming to murder the Messiah, or at the very least by conniving at that murder. There was a vast moral and spiritual gulf between the foreigners whose sole interest was the truth, and the self-serving motives of those for whom special revelation had become a mere instrument of nationalistic and tyrannical power. This tale at the opening of the Gospel is thoroughly in keeping with the Gospel's overall character and anticipates the concluding command of the Risen Christ that his followers should go out and teach all peoples.

At the same time Matthew uses a striking celestial phenomenon to indicate the cosmic as well as universal significance of Jesus's birth, once again anticipating the final command of one to whom all power had been given, not only upon the earth but 'in heaven'. It may well be that Matthew was stimulated to do this by genuine reports and recollections of planetary conjunctions and the appearance of comets at or about the time of Jesus's birth; and the evidence surveyed by Professor Humphreys can only strengthen this supposition. Whether or not we see historical events and the movements of stars and planets in this light depends upon the belief and attitude which we bring to our observations, much as was the case with the Magi on the one hand and Herod and his advisers on the other.

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Reply of Colin Humphreys to Peter Addinall

I am grateful to Peter Addinall for his comments on my 'Star of Bethlehem' paper. His comments raise some important issues and I am pleased to have this opportunity to respond. My numbered responses below correspond to the numbered comments of Peter Addinall.

1. Why does Matthew not call the star a comet if it was a comet? If Matthew wrote his gospel in c. AD 80, or somewhat before, and if the birth of Christ was in 5 BC, then Matthew was not an eye-witness to the star of Bethlehem. Just as the gospel of Luke relied on information 'handed down to us by those who from the first were eye-witnesses' (Luke 1:2), so Matthew's gospel would have been composed from earlier oral and written sources. If the source for the star of Bethlehem account (it has been suggested that the source was Mary, the mother of Jesus) had little knowledge of astronomy then it would have been natural to use the

word 'star' rather than 'comet'. Even today, many people refer to planets, meteors and comets as stars.

2. Did the Magi see the star in the east and then see it no more until they left Herod in order to go to Bethlehem? I do not think that Matthew implies this. I suggest in my paper (p. 94) that seeing the comet in the east was of particular significance to the Magi because it was a sign that the birth of the new king of the Jews was imminent (Ptolemy records that a comet in the east signified a rapidly approaching event to ancient Middle Eastern astronomers). This explains why the Magi said to Herod 'Where is the one who has been born king of the Jews? We saw his star in the east'. In other words, the Magi are saying that because they originally saw his star in the east when they started their journey (about one month previously), they believed the new king had been born. There is no suggestion in Matthew that the star first seen in the east then disappeared.

I suggest that the rejoicing of the Magi on seeing the star when they left Herod (verse 10), was not because it had disappeared and then reappeared, but rather because the comet they had originally seen in the east had moved on an east → south trajectory (as described in my paper), so that when the Magi left Jerusalem to head due south to Bethlehem, as instructed by Herod because of the prophecy in Micah, they saw the comet due south ahead of them. What a source of wonder and rejoicing that the comet they had originally seen in the east had moved to the south and stood over Bethlehem, the place to which they were travelling in accord with the Micah prophecy.

3. Was it a miracle and no ordinary star, planet or comet? I believe that Christians, particularly those who are scientists, should first try to understand biblical miracles in terms of known phenomena and mechanisms, and it is only if such 'explanations' fail that we should conclude that God is upholding the universe in a different way from normal at that particular place and time in history. If we can 'explain' some miracles in terms of known phenomena, then they are none-the-less miracles of timing: for example, if the star of Bethlehem at the birth of Christ was a 5 BC comet then what a miracle of cosmic planning and timing that the birth of Christ was heralded by the appearance of a comet.

As explained in my paper (p. 87), I believe that the most powerful evidence that the star of Bethlehem was a comet is the curious terminology in Matthew that the star 'stood over' the place where Jesus was born, since phrases such as 'stood over' and 'hung over' are uniquely applied in ancient literature (for example Dio Cassius and Josephus) to describe a comet, and they are not applied to any other celestial object. A comet appears to stand over a place because of its long tail pointing the head of the comet to a particular place. In my paper I interpreted 'the place where the child was' as Bethlehem, and suggested that the comet 'stood over' Bethlehem as seen from Jerusalem. I then suggested that a few

enquiries would have brought the Magi to the right dwelling, which I believe is correct, and I do not think it important that Matthew makes no mention of such enquiries (absence of evidence is not evidence of absence). However it might be worth mentioning that there are various woodcuts, etc, of comets which depict them as standing over not only a town or city but even picking out a house or a group of houses (the long tail is very effective at pointing the head of the comet, especially when it is low in the sky). Sir Isaac Newton sketched a real comet 'standing over' Kings College Chapel in Cambridge! Bethlehem is on a hill, and I would not rule out the possibility of a comet apparently standing over a house, or a group of houses, in Bethlehem.

4. Is the literature historical? This is a most important point because the vast majority of theologians believe the account of the Magi and the star of Bethlehem to be a myth. I suggest the following points strongly favour the account in Matthew's gospel as being historical:

(i) There is nothing improbable in the account apart from the moving star which stood over where Jesus was born, which is now seen not to be improbable if the explanation in my paper is accepted. Certainly the Magi are well documented by many ancient historians and there is clear evidence of their visiting kings such as Nero in AD 66, and Josephus informs us that Magi visited Herod in about 10 BC. The original readers of Matthew's gospel would not have found the account of Magi visiting Jesus to be improbable.

(ii) The early church fathers accepted the star of Bethlehem as being historical. For example, the third century scholar Origen, who was certainly not a literalist since he regarded the early chapters of Genesis as mythological (*De Principiis* IV, i, 5), considered the star of Bethlehem to be historical, and indeed he suggested this was a comet (*Contra Celsum* 1, 58).

(iii) The context is historical. Matthew 1 starts with the genealogy of Jesus and it is clearly intended to root the coming of Jesus into history, and to chart his descent from Abraham and David. Although the genealogy is somewhat schematic, with missing generations, various people mentioned are known from non-biblical literature to be real historical characters. Matthew 3 starts with an account of John the Baptist, which is clearly intended to be historical. Matthew 2, the account of the star, is sandwiched between Matthew 1 and 3: the context is therefore historical.

(iv) Jews and Christians have always opposed astrology and it is unlikely they would invest a story which appeared to favour it (see section 6 below).

5. Dr. Addinall states 'The star seen by the Magi was apparently not seen by anyone else, and certainly not by Herod . . .' There is no implication in Matthew that Herod had not seen the star. What worried Herod was the interpretation put on the star by the Magi whom he knew were expert astronomers, that the star they had seen in the east meant that

the king of the Jews had been born. As suggested in my paper (p. 93ff) three unusual astronomical events were involved in the interpretation of the Magi. First, the triple conjunction of Saturn and Jupiter in Pisces in 7 BC, the interpretation being that a king of the Jews would be born; second, the massing of 3 planets in 6 BC, the interpretation being that this would be a mighty king; third, the comet in the east, signifying that the birth of the king was imminent, and spurring the Magi to make their journey to Jerusalem. A particularly significant point is that 2 years elapsed between the 7 BC planetary conjunction and the 5 BC comet, which explains Herod killing all children in Bethlehem aged 2 years and under (see p. 95 of my paper). This '2 years' is otherwise difficult to explain. Herod and his agents would not 'easily find out for themselves' the assumed significance of these astronomical events, as Dr. Addinall suggests, since the Babylonian-trained Magi were the source of astronomical knowledge and 'interpretation' in those times.

6. I have given reasons in (4) above for taking the star of Bethlehem narrative as historical. However because an event is historical does not mean that it cannot also have symbolic significance. For example Paul writes 'Christ our Passover is sacrificed'. Here the symbolism of the salvation from slavery embodied in the Jewish Passover is transferred by Paul to the crucifixion of Christ, and the symbolism is heightened by the historicity of the crucifixion having occurred at precisely the same time, Nisan 14 in the Jewish calendar, as the Passover lambs were slain. Similarly, I believe that the significance of the star of Bethlehem story, which Dr. Addinall brings out so well in his comment (6), is heightened if the story is historical. In particular, as Dr. Addinall writes, the story demonstrates that God can use for his purposes pagans (gentiles) operating with superstitious astrological practices (a point also made by some third-century church fathers), and it illustrates the cosmic significance of the coming of Christ. When discussing the detailed nature of the star of Bethlehem it is important not to lose sight of the significance of the story, and I fully agree here with Peter Addinall who makes this point very clearly.

ERRATA

In the article by George L. Murphy in *Science and Christian Belief* 6, 101-111, 1994, entitled 'Cosmology and Christology', line 6 on page 111 should have read: 'But like other humans he has the capacity to know the patterns of alternative universes'. (Dr Murphy adds the comment that 'We can, of course, construct models of universes different from the one we inhabit'—ed.).