

matters arising

The Star of Bethlehem

I WOULD like to make a brief comment on David Hughes's article on the Star of Bethlehem. While the astronomical phenomena are described with vivid precision, the historical aspect would merit equal attention. Dionysius Exiguus is surely thought to have placed the Annunciation at 25 March 1 BC and the Nativity therefore at 25 December 1 BC and not AD 1. I quote from E. J. Bickerman¹ in support of my view that Dionysius' supposed 5-yr error is at best an irrelevance (page 77 of ref. 1).

An era *ab urbe condita* (from the founding of the city of Rome) did not in reality exist in the ancient world, and the use of reckoning the years in this way is modern. . . . The principal reason for not using the system *ab urbe condita* was that the age of the city was disputed: *est enim inter scriptores de numero annorum controversia* (Cic. *Brut.* 18, 72). The date of the founding in Roman historiography—excluding the more extreme opinions—oscillates between 759 and 748 BC.

Of 58 modern authors cited by Holzmeister², 33 select for the year of the Nativity 7–5 BC, so Hughes represents majority modern opinion. Of 42 ancient opinions listed, however, not one falls as early as this period and only one before the supposed date of Herod's death. A thorough re-examination of the date of the Nativity must also ask whether it is certain that Herod died in 4 BC. Josephus states that Herod reigned 34 years from the death of his predecessor, executed by Antony some time after the capture of Jerusalem which fell in 37 BC. The obvious arithmetical error is accounted for by the explanation that Josephus counted the year in which a king died and the (same) year of the accession of his successor as two separate years, and therefore, overestimated the length of each reign by 1 year—his so-called 'inclusive' method.

Although this notion of Josephus' mode of computation is the pillar on which the modern opinion rests, no shred of evidence is adduced for it, for there is none. Evidence to the contrary is, however, easily found in *Jewish Antiquities*. Between February 135 BC and October 63 BC there were in Jerusalem six rulers in the 72 years 8 months. Summing the lengths of reigns as given by Josephus, we have 71 years 6 months. This is very exact and certainly evidence that Josephus did not reckon 'inclusively'.

Since Herod died shortly after a lunar

eclipse, the times are restricted in which his death could have fallen. 4 BC is too early to allow for a reign of 34 years (if the 'inclusive' method of counting is rejected) and there were no such eclipses in 3 or 2 BC. It is then hard to escape from the conclusion that Herod died following a partial eclipse in 9/10 January 1 BC having completed 34 years' reign a few months earlier. Just before the eclipse, there was an uproar in the Temple recorded by Josephus, and possibly unleashed by the advent of the Magi if the traditional date of the Adoration, 6 January is again considered.

ORMOND EDWARDS

7, Queen's Terrace,
Aberdeen, UK

¹ Bickerman, E. J. *Chronology of the Ancient World* (Thames and Hudson, London, 1968).

² Holzmeister, U. *Chronologia Vitae Christi* (Rome, 1933).

HUGHES'S suggestion that the 'Star of Bethlehem' was probably a triple conjunction of Saturn and Jupiter in the constellation Pisces in 7 BC was anticipated by Stauffer in 1957 (*Jesus: Gestalt und Geschichte*). The significance of this '*coniunctio magna*' was explained as follows: Jupiter was the 'star' of the world ruler and the constellation of the fishes as the sign of the last days; the planet Saturn was considered in the east to be the 'star' of Palestine. So the conjunction indicated, not a 'Jewish king born in Israel', but that in that year there would appear in Palestine the ruler of the world in the last days.

As long ago as 1835 D. F. Strauss observed the evangelist's contrived story to show fulfilment of the prophecy of Micah that the ruler of Israel should come from Bethlehem, and claimed "we have absolutely no guarantee that Bethlehem was his birth-place" (*The Life of Jesus Critically Examined*, SCM ed. 1973, p 156). Guignebert concluded that the magi, star, massacre of innocents, birth in a stable, shepherds, angels, and so on, are all unhistorical and that we do not know where Jesus was born, except in Galilee. He also noted that the idea that the Jewish population had to move all over the land to register for the taxation was "outside the plane of reality" (*Jesus* 1935, pp. 94 & 99). Mackinnon noted the 'assumption' that enrolment required the parents of Jesus to journey to Bethlehem for this purpose, and did not believe the stories of the magi and

the massacre of infants (*The Historic Jesus*, 1931, pp. 19 & 24). More recently, Gunther Bornkamm, in his *Jesus of Nazareth* (1951) says hardly anything about the birth, infancy or early years of Jesus. He claims that the birth and infancy stories of Matthew and Luke are largely legendary in character and do not contribute to a *History of Jesus*.

All that we know about Jesus is that he was born in Galilee. If he was about 30 years old (Luke III, 23) when John baptised him in Tiberius's 15th year (Luke III, 1) then it looks as if he was born in the terminal year, and that the chronology of Dionysius Exiguus is correct. We know of no reason why this should not have been so, and there is no cause to believe the stories associating the birth with celestial signs or the Roman registration of 6 CE.

Incidentally, Dionysius did not "forget the year zero"; there was no such year, as demonstrated by Hughes's own chart!

STUART CAMPBELL

4, Dovecot Loan,
Edinburgh, UK

KEPLER may not have been the first to be impressed by a Jupiter-Saturn appulse¹. In the chronicles of Worcester Priory (1377) a conjunction in Aquarius was recorded in 1285—"it had not happened since the Incarnation". Newton² comments that this suggests that the Star "had already been interpreted as a conjunction by AD 1285". It could be a rhetorical expression.

The object of -5 (6 BC) is regarded by Stephenson³ as a comet, because there is a possible reference to a tail and motion and certainly there does not seem to be any remnant known.

CICELY M. BOTLEY

Royal Astronomical Society,
London, UK

¹ Hughes, D. W. *Nature* 264, 513–517 (1976).

² Newton, R. R. *Mediaeval Chronicles and the Rotation of the Earth* 691 (John Hopkins University Press, Baltimore and London, 1972).

³ Stephenson, F. R. *Q. Jl R. astr. Soc.* 17, 12 (1976).

I COMMENT here on two points made by David Hughes. First, there seems to be no need for a year zero because from our standpoint, in 1976, any year in which Jesus Christ was born, be it spring or autumn, was 1 AD—"the first year of the Lord," and the preceding year 1 BC—"the first year before Christ." Perhaps the author thinks of