## THE DATE OF TIMOLEON'S CROSSING TO ITALY AND THE COMET OF 361 B.C.

## I. TIMOLEON

In the year of Eubulus' archonship at Athens (345/4), Timoleon the Corinthian, who had been chosen by his fellow citizens to command at Syracuse, prepared for his expedition to Sicily. He hired seven hundred mercenaries and having put his soldiers aboard four triremes and three fast sailing ships departed from Corinth. Following the coastal route he picked up three further ships from the Leucadians and Corcyreans and then with ten ships in all crossed the Ionian gulf to Italy. Thus far Diodorus Siculus 16. 66. 1-2. In the course of the crossing, Diodorus continues (66. 3), a peculiar and miraculous event befell Timoleon, with the supernatural order coming to the support of his enterprise and foreshadowing his eventual fame and the glory of his achievements. I now quote Diodorus' own words: δι' ὅλης γὰρ τῆς νυκτὸς προηγεῖτο λαμπὰς καιομένη κατὰ τὸν οὐρανὸν μέχρι οδ συνέβη τὸν στόλον εἰς τὴν Ἰταλίαν καταπλεῦσαι. In translation: 'throughout the whole night he was preceded by a torch that blazed in the sky until the flotilla reached land in Italy'. No more than a single night would, of course, have been required in order to accomplish the crossing of the gulf, with Timoleon presumably heading from Corcyra for the Iapygian promontory as was normal procedure in such transits.1 Diodorus goes on (66. 4-5) to recount that Timoleon, who had been informed in Corinth that Demeter and Persephone would accompany him on his voyage, recognized the actual assistance of the two goddesses, dedicated his best ship to them and named it Sacred vessel of Demeter and Kore. After diplomatic activity at Metapontum and Rhegium Timoleon proceeded from Italy to Sicily, where he landed at Tauromenium (66. 5-68. 7) still in the year of Eubulus.

Timoleon's departure from Corinth and his voyage to Italy are also described at Plutarch, Timoleon 8. When Timoleon's ships were already prepared, we are told, the priestesses of Persephone dreamed that the goddess and her mother expressed the intention of sailing with Timoleon to Sicily. Accordingly, the Corinthians equipped a sacred trireme in addition to the other vessels and named it after the two goddesses. With seven Corinthian ships, two from Corcyra and a tenth from Leucas, Timoleon set sail. To take up Plutarch's own words: νυκτὸς ἐμβαλῶν (the subject is Timoleon) εἰς τὸ πέλαγος καὶ πνεύματι καλῷ χρώμενος ἔδοξεν αἰφνιδίως ῥαγέντα τὸν οὐρανὸν ὑπὲρ τῆς νεῶς ἐκχέαι πολὺ καὶ περιφανὲς πῦρ ἐκ δὲ τούτον λαμπὰς ἀρθεῖαα ταῖς μυστικαῖς ἐμφερὴς καὶ συμπαραθέουσα τὸν αὐτὸν δρόμον, ἡ μάλιστα τῆς Ἰταλίας ἐπεῖχον οἱ κυβερνῆται, κατέσκηψεν. In translation: 'at night, after he had entered the open sea and was enjoying a favourable wind, the heaven seemed to burst open suddenly above his ship and to pour out abundant and conspicuous fire; from this arose a torch resembling those which participants in the mysteries carry; it ran along the same course as that of the ships and darted down² precisely upon that point in

<sup>&</sup>lt;sup>1</sup> See, for example, Thucydides 6. 30. 1 and 6. 44. 1. The further Thucydidean passages 1. 36. 2 and 1. 44. 3 suggest that Timoleon's route was conventional in every respect.

<sup>&</sup>lt;sup>2</sup> In view of  $\sigma \nu \mu \pi a \rho a \theta \dot{\epsilon} o \nu \sigma a$  its ordinary sense (for which see, for example, [Aristotle], de mundo 395 a 25, where the subject is a lightning bolt) has to be accorded to  $\kappa a \tau a \sigma \kappa \dot{\eta} \pi \tau \epsilon \iota \nu$ . At Aristotle, Hist. Anim. 553 b 30 and at [Aristotle], Problemata 906 a 37 the verb is applied oddly to the rainbow. For  $\dot{\epsilon} \gamma - \kappa a \tau a \sigma \kappa \dot{\eta} \pi \tau \epsilon \iota \nu$  applied to a bolide, see Zonaras (probably echoing Cassius Dio), 8. 17.

Italy for which the pilots were heading'. The *manteis*, Plutarch continues, declared that the dream visions of the priestesses at Corinth were confirmed and that participating in the expedition Demeter and Persephone were responsible for the celestial illumination

Diodorus and Plutarch, it seems sufficiently clear,<sup>3</sup> were following different sources. In the account of the former Timoleon himself names a ship in honour of Demeter and Persephone after his observation of the prodigy in the heavens. In the narrative of Plutarch the Corinthians name the ship for the goddesses before Timoleon's flotilla departs. With respect to this element the two versions are quite irreconcilable.

In Diodorus Timoleon sails from Corinth with seven ships and picks up further vessels at Leucas and Corcyra. In Plutarch the vessels supplied by Leucas and Corcyra sail with Timoleon from Corinth. This discrepancy may be only apparent, the result of Plutarch's careless telescoping of the material upon which he drew. It would have been normal for Timoleon to proceed to Italy by way of Leucas and Corcyra,<sup>4</sup> and his source may well have reported in fact that the non-Corinthian ships used by Timoleon were picked up *en route*. Certainly Plutarch's  $\pi \acute{\epsilon} \lambda \alpha \gamma o_S$  is the Ionian gulf.

To all appearances again Diodorus and Plutarch present disparate accounts of the celestial phenomena witnessed by Timoleon. In Diodorus a single lampas is observed, visible the whole night and apparently preceding the flotilla, which heads in a westerly direction across the Ionian gulf. We receive the impression of a stable body which maintains a constant position relative to the backdrop of fixed stars and like them conforms to the general westward rotation of the celestial sphere. Diodorus provides no information as to the manner of the object's disappearance. The natural inference would be that like the conventional celestial bodies it became invisible as the sun rose. In Plutarch on the other hand the lampas, whose advent is preceded by a seeming opening of the heavens and outpouring of fire, is palpably a transient phenomenon. It travels rapidly along a trajectory parallel to the flotilla's course and then appears to plummet downward at the point on the Italian coast towards which Timoleon is heading. It may be that entirely different descriptions in Diodorus' and Plutarch's sources are faithfully reflected. It is also possible that Diodorus has partly truncated and partly revamped an account more or less compatible with that supplied by the source of Plutarch. In a recent discussion of the sources of Diodorus and Plutarch for their accounts of Timoleon's adventures Talbert<sup>5</sup> endorses the majority view of previous critics that Plutarch drew principally upon Timaeus of Tauromenium. He then goes on to argue that Diodorus relied basically upon a single, different source whose identity it is impossible to establish. In both respects Talbert's conclusions are convincing and to be accepted.

With respect to the occasion of the naming of one of Timoleon's ships in honour of Demeter and Persephone there is no way of deciding between the incompatible accounts of Timaeus and the unknown historian. If the difference between the two descriptions of the heavenly portent reflects a genuine discrepancy between the two sources, rather than being an artefact of Diodorus, there can be no question but that the detailed account of Timaeus is to be preferred to its counterpart. Timaeus, to Polybius' disgust, took an especial interest in prodigies and was motivated to present a comprehensive and accurate account of the phenomena concerned.

- <sup>3</sup> Although not, strangely, to Hammond at CQ 32 (1938), 147.
- 4 See note 1 above.
- <sup>5</sup> See R. J. A. Talbert, Timoleon and the Revival of Greek Sicily (Cambridge, 1974), 22-38.
- <sup>6</sup> Talbert, op. cit. 37 toys with the candidacy of Athanis but concludes rightly that the counter-indications are intimidating.
  - <sup>7</sup> See Polybius, 12. 24. 5.

The only feasible candidate that comes to mind for the identification of the persistent *lampas* that figures in Diodorus is a comet.<sup>8</sup> Although in prose,<sup>9</sup> in contexts dealing with celestial portents, *lampas* and its Latin counterpart *fax* most often connote rapidly moving meteoric fire-balls (bolides) with torch-like trails,<sup>10</sup> both terms are also found applied to relatively static objects which invariably turn out, if sufficient additional data can be brought to bear, to be comets,<sup>11</sup> presumably with their tails pointing more or less upward.<sup>12</sup> There is, however, no mention in Chinese sources of a comet during the period concerned, and a cometary hypothesis is barely compatible with the implication of Diodorus' account that the *lampas* was visible in the *east* at nightfall and therefore in opposition to the sun. Normally comets are observed in the *west* at sunset and are only visible in the east close to sunrise. All in all it is difficult to resist the conclusion that Diodorus (or his source) elaborated on the *lampas* for dramatic effect oblivious to the implausibility of his representations. Pliny, *HN* 2. 90, which has been adduced, misguidedly, in support of identifying the *lampas* seen by Timoleon and his companions as a comet, is discussed in section II.

Timaeus, on the other hand, presents a credible and coherent syndrome. Timoleon and his fellow voyagers witnessed a spectacular meteor shower, the abundant and conspicuous fire poured out from the heavens, whose supposed point of rupture close to the zenith  $(i\pi \hat{\epsilon} \rho \ \tau \hat{\eta}_S \ \nu \epsilon \hat{\omega}_S)$  will be the shower's radiant. The same display, whose crescendo was evidently rather rapid, featured an impressive torch-like bolide which sped parallel to Timoleon's course before appearing to plunge to earth close to the coast of Italy.

If this interpretation of the phenomenon conceived of as a divine endorsement of Timoleon's mission is correct – and in my opinion it is all but irresistible –, then there probably emerges a date for his crossing of the Ionian gulf of a precision that has so far eluded historians who have dealt with his career. <sup>15</sup> To judge from Chinese records the meteor shower most conspicuous in the pre-Christian era was that now named the Lyrids. <sup>16</sup> The Lyrids are at present to be observed around 22 April. Through the

- <sup>8</sup> So A. A. Barrett, *Journal of the Royal Astronomical Society of Canada* 72 (1978), 87–8. Barrett, unfortunately, seems to have been unaware of the content of Plutarch, *Timoleon* 8.
- <sup>9</sup> In poetry, of course, one may find both *lampas* and *fax* used of such conventional heavenly bodies as the sun (see, for example, Parmenides, *DK* 28 B 10. 2-3; Lucretius 5. 976; and Seneca, *Thyestes* 835) and moon (see, for example, Ennius, *Annales* 16. 401-2 Warmington; and Horace, *Carmina* 4. 6. 38). *Fax* can also be applied to lightning (see, for example, Accius, *Epinausimache* 308-9 Warmington; and Valerius Flaccus 1. 568 and 4. 670).
- <sup>10</sup> See, for example, [Aristotle], de mundo 395b11-17; Cicero, de haruspicum responsis 39; Lucretius 2. 206 and 5. 1191; Frontinus, Strategemata 1. 12. 6; and, especially, Pliny, HN 2. 96.
- <sup>11</sup> For example, the *fax ardens in caelo* that figures among the *prodigia* for 137 B.C. at Julius Obsequens 24 can be identified as a comet on the basis of Chinese records, for which see Ho Peng Yoke, *Vistas in Astronomy* 5 (1962), 145.
  - <sup>12</sup> See Achilles (astronomus), introductio in Aratum 28.
- <sup>13</sup> A good collection of graphic eye-witness accounts, old and recent, of meteor showers, that may be compared with the description in Plutarch is to be found in Peter Lancaster Brown, Comets, Meteorites and Men (London, 1973), 202–16. Identification of the phenomena described by Timaeus as an auroral display, for which see, for example, R. Stothers, Isis 70 (1979), 92, can be safely dismissed. Very active aurorae only develop gradually in the wake of other forms and auroral displays do not commence in the region of the zenith. If one were, nevertheless, to persist with an auroral hypothesis one would be forced, counter to the principle of parsimony, to admit the coincidence of an aurora and a spectacular fireball.
  - 14 See above with note 10.
- <sup>15</sup> See especially K. J. Beloch, *Griechische Geschichte* (2nd ed. Berlin and Leipzig, 1922), iii, part 2, 380-5 and Talbert, op. cit. 41-51.
- <sup>16</sup> For the most recent compendium of early Chinese records of meteor showers see Zhuang Tian-shan, 'Ancient Chinese Records of Meteor Showers', *Chinese Astronomy* 1 (1977), 197–220.

effects of precession the observation date, in extrapolated Julian terms, for antiquity was much earlier. Their occurrence was noted in China on 16 March in 687 B.C.<sup>17</sup> and on 25 March in 15 B.C.<sup>18</sup> At the latitude of the Ionian gulf the Lyrids' radiant at the time of their maximum culminates sufficiently close to the zenith to fulfil the requirements of Timaeus'  $\delta \pi \hat{\epsilon} \rho \ \tau \hat{\eta}_S \ \nu \epsilon \hat{\omega}_S$ . If Timoleon indeed observed the Lyrids at their maximum on the final leg of his voyage to Italy in the archon year of Eubulus his crossing of the Ionian gulf was completed on 21 March, 344 B.C. with the shower's radiant culminating around 4 a.m. From the point of view of ancient sailing practice Timoleon departed from Corinth rather early in the year, but spring was near and no doubt the exigencies of the harassed Syracusans were felt to be compulsive.

Diodorus (16. 90. 1), who, to reiterate, set Timoleon's arrival in Sicily within the archon year of Eubulus, in which he set sail from Corinth, states that he died at Syracuse in the archon year of Phrynichus (337/6) having been general of the Siceliote Greeks for eight years ( $\sigma \tau \rho \alpha \tau \eta \gamma \dot{\eta} \sigma \alpha s \, \tilde{\epsilon} \tau \eta \, \dot{\sigma} \kappa \tau \dot{\omega}$ ). At Timoleon 37 Plutarch reports that Timoleon went into retirement at Syracuse having purged Sicily of her miseries in less than eight years ( $\dot{\epsilon} \nu \, o \, \dot{\nu} \dot{\delta}$ )  $\ddot{\delta} \lambda o \, \dot{s} \, \tilde{\epsilon} \tau \epsilon \sigma \iota \nu \, \dot{\sigma} \kappa \tau \dot{\omega}$ ). The statements are reconcilable on the supposition that the eight full years of Diodorus actually include the period of Timoleon's retirement, which Diodorus fails to record. These vague chronological indications are readily compatible with Timoleon's arriving in the West in late March 344, provided that we place his death towards the end of Phrynichus' year of office.

## II. THE COMET OF 361 B.C.

At HN 2. 89–90 the elder Pliny discusses the morphology of comets. At the end of 90 he writes: 'semel adhuc iubae effigies mutata in hastam est, Olympiade CVIII, urbis anno CCCXCVIII'.

CVIII is the Olympiad figure that appears in a majority of the manuscripts. The variants CVIIII and CV are both singly attested. Olympiad 108 ran from 348/7 to 345/4 B.C.; Olympiad 109 from 344/3 to 341/0; and Olympiad 105 from 360/59 to 357/6.

All manuscripts make the year from Rome's foundation CCCXCVIII. The year concerned would be 356 B.C.

In general, editors have accepted CVIII, which is not uniformly attested, for the Olympiad and emended the A.U.C. figure, upon which all the manuscripts agree, to CCCCVIII, that is 346 B.C.

In his *RE* article 'Kometen' Gundel suggested that the comet referred to by Pliny is to be identified with the celestial phenomenon witnessed by Timoleon while crossing the Ionian gulf. In that case while the Olympiad figure CVIII could stand the A.U.C. figure ought strictly to be CCCCX, that is 344, coextensive with the latter part of Olympiad 108. 4 and of the archon year of Eubulus at Athens. While somewhat closer to the manuscripts' reading, CCCCVIIII would still be a year out. Rather understandably, Beaujeu pronounced Gundel's proposed equation 'très aléatoire'. <sup>20</sup> If in fact Timoleon observed a meteor shower and fireball, it is out of the question.

- 17 Zhuang, 199.
- <sup>18</sup> Zhuang, 199. The source is the *Han Shu* (27Cb; 19a). The notice is worth quoting for comparative purposes: 'In *Yung-shih* II (15 B.C.) ii on *kuei-wei* (March 25) after midnight stars fell like rain, ten or twenty feet (degrees) long. They appeared continuously and were extinguished before they reached the earth. At cockcrow they stopped'. Note the duration. The translation is from H. Dubs, *The History of the Former Han Dynasty by Pan Ku* ii (Baltimore, 1944), 403 n. 11. 9.
  - 19 See Pauly's Realencyclopädie, Band XI. 1, col. 1184.
  - <sup>20</sup> J. Beaujeu, Pline l'ancien; histoire naturelle, livre II (Paris, 1950), 177 n. 5.

Since one of the figures in Pliny's sentence is almost certainly corrupt and both could well be, the most sensible approach, I suggest, is to look for a genuine comet that falls within the range of reasonable possibilities and then perform surgery on Pliny's text accordingly.

In Chinese records the appearance of a comet is noted for 361 B.C.<sup>21</sup> This is only one year prior to the first year of Olympiad 105. I commend one of two approaches to Pliny's text, both based on the supposition that the comet which is referred to is the comet of 361.

- A. We read CV for the Olympiad figure and emend the A.U.C. figure to CCCXCIIII, equivalent to 360 B.C. We would then have to suppose that Pliny's source was slightly in error as to the year of the comet's appearance.
- B. We emend the Olympiad figure to CIIII and the A.U.C. figure to CCCXCIII (361 B.C.) thus bringing both into conformity with the Chinese evidence. Both changes involve deletion of V from manuscript readings.

On balance, I prefer the second alternative.

Monash University

P. J. BICKNELL

<sup>21</sup> See Ho Peng Yoke, 143.