

# VENUS OBSERVED? A NOTE ON CALLIMACHUS, FR. 110

Since we cannot hope to witness a catasterism for ourselves, we are fortunate to have a detailed first-hand account of the inauguration of Coma Berenices, the last constellation to be added to the ancient list until the seventeenth century. However, the description of the critical stages in the process presents various difficulties resulting not so much from obfuscation on Callimachus' part (natural though this might be in an account of a miracle) as from the circumstances of the poem's transmission and the problems to be expected in interpreting occasional verses more than two millennia after the event to which they refer. In this note I shall attempt to clarify some of the obscurities surrounding the Lock's translation.<sup>1</sup>

ἄρτι [ν]εότμητόν με κόμαι ποθέεσκον ἄδε[λφεαί,  
καὶ πρόκατε γνωτὸς Μέμνονος Αἰθίοπος  
ἔετο κυκλώσας βαλιὰ πτερὰ θήλυς ἀήτης,  
ἔππο[ε] ἰοζώνου Λοκρίδος Ἀρσινόης,  
[.]αςε δὲ πνοιῇ με, δι' ἥερα δ' ὕγρον ἐνείκας 55  
Κύπρι]δος εἰς κόλ[ι]πους ἔθηκε  
αὐτῇ μιν Ζεφυρίτις ἐπὶ χρέο[ε]  
... Κ]ανωπίτου ναιέτις ἀ[ι]γιαλοῦ...  
ῥδ[α]σι] λουόμενόν με παρ' ἀθα[νάτου]ς ἀνιόντα  
Κύπρι]ς ἐν ἀρχαίοις ἄστρον [ἔθηκε νέον.  
(fr. 110, 51–8, 63–4)<sup>2</sup>

abiunctae paulo ante comae mea fata sorores  
lugebant, cum se Memnonis Aethiopis  
unigena impellens nutantibus aera pennis  
obtulit Arsinoes Locridos ales equos,  
isque per aetherias me tollens auolat umbras 55  
et Veneris casto collocat in gremio.  
ipsa suum Zephyritis eo famulum legarat,  
Graia Canopitis incola litoribus...  
uuidulam a fluctu cedentem ad templa deum me  
sidus in antiquis diua nouom posuit.  
(Cat. 66.51–8, 63–4)

It was long the general opinion that 51–8 narrated the Lock's journey to the shrine of Aphrodite–Arsinoe at Cape Zephyrium from a Pantheon at Alexandria,<sup>3</sup> thought

<sup>1</sup> The passage with which this note is chiefly concerned has been recently discussed by G. L. Huxley ('Arsinoe Lokris', *GRBS* 21 [1980], 238–44); though I agree with him in thinking that the relevance of Venus has been underestimated, I take a somewhat different view of its place in Catullus' picture.

<sup>2</sup> The text is preserved by two papyri, *PSI* 1092 and *P. Oxy.* 2258; half-brackets indicate letters supplied from the latter's scholia. In 54 *PSI* 1092 gives Λοκρικὸς; for further details see Pfeiffer's apparatus.

<sup>3</sup> We may disregard the theory of Robinson Ellis (*Commentary on Catullus*<sup>2</sup> [Oxford, 1889], 386), who supposed that the Lock was removed from the Royal Palace at Alexandria. However, though Ellis was not in general a luminous interpreter of Catullus, his discussion of this poem squarely faces difficulties to which others have tended to turn a blind eye and is still worth reading.



should not be too much surprised if he has removed or camouflaged astronomical detail elsewhere; the Romans were, confessedly, less interested in astronomy than the Greeks,<sup>12</sup> and it was clearly the sentimental, romantic aspect of the poem which appealed to him.

Callimachus' Zephyr, as I see it, conveys the Lock not upwards into the stratosphere but eastwards into the sea; the somewhat ostentatious erudition of *γνωτὸς Μέμνονος Αἰθίοπος* (52) serves to remind us that Zephyr's mother was Eos and hence suggests the hour of his intervention. So far there is nothing to surprise us, apart from the wind's equine avatar (54), which does not affect my argument;<sup>13</sup> reduced to plain terms this appears to be the only explanation available to the temple personnel if they were really required to account for the Lock's disappearance within hours of its dedication.<sup>14</sup>

From this it follows that *Κύπριδος κόλποι* must be the sea, or in the sea. This location should not unduly disconcert anyone: *ἀγνώσσεις ὅτι Κύπρις ἀπόσπορός ἐστι θαλάσσης/καὶ κρατέει πόντοιο καὶ ἡμετέρων ὀδυνάων*;<sup>15</sup> Aphrodite's double function as goddess of love and of the sea provided a rewarding theme for the Greek epigrammatists.<sup>16</sup> In her shrine at Zephyrium her role as *Εὐπλοία* was not likely to be overlooked.<sup>17</sup> The temple was dedicated by the admiral Callicrates and the goddess's marine connections are stressed in the epigrams of Callimachus and Posidippus relating to the sanctuary.<sup>18</sup> It is tantalising not to know what epithet is represented by Catullus' *casto*;<sup>19</sup> for the use of *κόλπος* in a half-literal sense alike applicable to the sea and to a sea-goddess we may compare the Homeric *Θέτις δ' ὑπεδέξατο κόλπῳ* (*Il.* 6.136, cf. 18.398).

An astronomical consideration may also be relevant to this interpretation, and though there is a slight danger of circularity, it seems worth airing. Given the poem's theme and the prominent part played in the fantasy by Aphrodite we might expect some reference to the planet Venus. By the mid-third century its designation as Aphrodite's star was well established in scientific contexts;<sup>20</sup> already in Aristotle we find *Ἀφροδίτη* and *Ἑρμῆς tout court* used, by a natural brachylogy, as we should

<sup>12</sup> Cf. Verg. *A.* 6.849–50.

<sup>13</sup> 'Minime gratus redit, quem in perpetuum e textu expulsum esse sperabamus, equus mirus' comments Pfeiffer. After the objections which he and Housman had assembled against a horse as Aphrodite's emissary (*Philol.* 87 [1932], 197 ff. = *Kallimachos* ed. A. D. Skiadas [Darmstadt, 1975], 116 ff.), *CR* 43 (1929), 168 (= *Classical Papers of A. E. Housman* [Cambridge, 1972], iii. 1157), it is unnerving to find in *P. Oxy.* 2258 apparent confirmation for *equos* of Catullus' MSS. However, anyone who would still prefer a horseman could restore the Homeric *ἵππῶ[τ]* instead of *ἵππο[ε]*; the scribe does not normally write elided vowels, and this elision does not appear to violate Callimachean metrical practice: for elision of final *a* with nouns, adjectives or verbs after the first trochee cf. *h.* 2.82; 4.202; 5.55; fr. 66.7. Of course, the cogency of this supplement depends on one's view of the corresponding line in Catullus.

<sup>14</sup> It is difficult altogether to dismiss the suspicion that the Lock's disappearance was engineered by the man who knew where to look for it; but he would have needed to supply his accomplices with a cover-story.

<sup>15</sup> Musae. 249–50.

<sup>16</sup> E.g. Antip. Thess. 93 (597 ff.) Gow–Page (= *A.P.* 9.143), Gaet. 1 Page (= *A.P.* 5.17), Phld. 15 (3246 ff.) Gow–Page (= *A.P.* 5.306); for further material see Nisbet and Hubbard on Hor. *O.* 1.5.16.

<sup>17</sup> On Aphrodite Euploia see Roscher, i. 401–2, Nilsson, *GGR* i. 521.

<sup>18</sup> Call. *Epigr.* 5 (1109 ff. Gow–Page), Posidipp. *Epigr.* 12, 13 (3110 ff.) Gow–Page; see further Fraser, op. cit. i. 568–9, 667–8, ii. 388–9 nn. 389–90; 811–2 nn. 139–40; 935–5 nn. 400–4.

<sup>19</sup> Ardizzoni's restoration [*θήκεν ἄφαρ καθαρῶς*] (loc. cit. n. 9) deserves serious consideration.

<sup>20</sup> First attested in the fourth century: see *LSJ* s.v. *Ἀφροδίτη* III, *RE* xx 2112 ff. s.v. Planeten, viii A 887 ff. s.v. Venus (2). On the wider Middle Eastern background to these divine names see W. Eilers, *Sinn u. Herkunft der Planetennamen*, *SBAW* (1975), 5.

use 'Venus' and 'Mercury'.<sup>21</sup> Poets, however, continued to refer to Venus as Phosphorus (or Heosphorus) or Hesperus, partly no doubt from conservatism, but partly for horological convenience.<sup>22</sup> Whether the more technical nomenclature would have come spontaneously to non-scientific minds in Callimachus' circle we cannot tell, but it is probably fair to suppose that the use of these divine names for the planets was familiar to many who still naturally tended to think of Venus as the Daystar or the Evening Star. However, whether or not the link between planet and goddess would have occurred to Callimachus independently, Conon no doubt saw to it that he was well briefed with the relevant data. Since the poem as a whole turns on the conceit of a metaphysical reality to the conventional system for mapping space, we might have expected Callimachus to exploit the nominal connection between the goddess who dominates the tale and the brightest, and poetically most interesting, star in the heavens.

Planets, however, as Aratus emphasises (456 ff.), are tricky:

οὐκ ἂν ἔτ' εἰς ἄλλους ὁρόων ἐπιτεκμήραιο  
κείνους ἤχι κέονται· ἐπεὶ πάντες μετανάσται...  
οὐδ' ἔτι θαρσαλέος κείνων ἐγώ.

Coma will unfailingly precede Bootes across the heavens (67) *polus dum sidera pascet*, but Venus, weaving its erratic way through the zodiac, does not bear a constant relation to any constellation, and if Callimachus was to include it in the story he would have needed to take account of its actual position at the critical period. Was it visible at dawn, at dusk, or not at all? Was it near to the new constellation (which, as the Lock helpfully reminds us (65), lies close to two zodiacal signs, Leo and Virgo), or at the opposite side of the zodiac, or somewhere between? To be sure, Callimachus was not compiling an ephemeris; but the effectiveness of his fantasy is obviously enhanced if it is supported by accurate factual detail.

As we have seen, the Lock appears to suffer a sea-change at, or a little before, dawn. Venus, I infer, is supposed to be just below the eastern horizon, which, by poetic convention, is equated with the all-encircling Ocean, irrespective of how it might appear to an actual observer.<sup>23</sup> It may be said that, if this is what Callimachus meant, it is not as obvious as it might be. However, our text of Callimachus is defective, and in the interpretation of an author who is always allusive and notably disinclined to use two words when one would do we are undoubtedly handicapped by partial dependence on a translation which tends to obscure astronomical detail; much as we may admire the neat way in which Catullus at times reproduces the metrical pattern and word-order of his original, we must allow that fidelity to its wording was not his first concern.<sup>24</sup> It would therefore be useful if we could establish the position of Venus independently by way of compensation for this disadvantage.

<sup>21</sup> *Met.* 1073b30–2: εἶναι δὲ τῆς τρίτης σφαίρας τοὺς πόλους τῶν μὲν ἄλλων ἰδίους, τοὺς δὲ τῆς Ἀφροδίτης καὶ τοῦ Ἑρμοῦ τοὺς αὐτοὺς.

<sup>22</sup> Cf. *Call.* fr. 291.

<sup>23</sup> οἱ δὲ ποιηταὶ Ὠκεανὸν αὐτὸν (τὸν ὀρίζοντα) καλοῦσιν (*Isag. ad Arat.* Maass, p. 95, 10). Failure to recognise this convention at *Il.* 23.227, where Homer describes the sun rising out of the sea, has led to the inference that the composer of the *Iliad* must have lived on an eastward-facing coast.

<sup>24</sup> 'It is now evident' wrote Lobel in his introduction to the relevant fragments of *P. Oxy.* 2258 'that it is impossible to depend on the Latin, which too often, as at ll. 45, 67 seq., 72, 77, 80–fin., recedes far from the Greek'; Catullus' interpreters seem strangely reluctant to admit this. But in addition to Lobel's catalogue of divergences (which relates only to the new evidence afforded by the Oxyrhynchus fragment) we must note Catullus' less technical version of v. 1, a small but significant discrepancy over the Chalybes' contribution to iron-working (48–9), and the lack of

This may seem an unrealistic aspiration, since we are not given precise information about the time of year when the new constellation was first recognised. But Conon's ingenious compliment would have worked much better if he could point to a group of stars which had clearly only just risen, and on this hypothesis the relevant period is at or shortly after the heliacal rising of Coma, about 3 September.<sup>25</sup> Since visibility depends partly on the brightness of the stars concerned (and those constituting Coma are not particularly bright)<sup>26</sup> and their proximity to the ecliptic and partly on weather-conditions, we should not assume that the new constellation was visible to any observer with normal vision who was gazing eastward from Alexandria just before dawn on 4 September; if Conon expected Berenice to evince a livelier curiosity than Herod mustered when told of a more mysterious celestial novelty,<sup>27</sup> he would have been wise to allow some days to elapse in order to display effectively the group of stars which henceforth would bear her name. During this period Venus was passing from Leo to Virgo; it entered the latter sign c. 10 September, but was invisible, as the sun was also in Virgo.<sup>28</sup> Aphrodite's star was thus as close as it could be to Coma at the time when the latter first rose as a recognised constellation.

This happy ἀστροθεσία evidently favours the notion that the goddess controlled the whole affair. From her temple at Zephyrium the Lock was transferred eastwards to a submarine rendezvous with her star, which would subsequently accompany it as an invisible escort until it had become accustomed to its exalted status.

Alike as daystar and as evening-star Venus has proved a powerful source of poetic inspiration. But the poet who wishes to refer to it when it is not actually visible had better not be prolix.

Astronomically all this is merely a *jeu d'esprit*. Callimachus, who had read Aratus with keen appreciation,<sup>29</sup> knew perfectly well that the stars constituting Coma were familiar to observers, and his opening lines, reminiscent of Keats' tribute to Herschel's

sufficient detail to make it clear that Aphrodite's emissary is a wind (53). The proportion of text over which we can make a fair comparison is small, and whatever may be the correct explanation for the considerable discrepancies between the Oxyrhynchus fragment and Catullus at 80 ff., the differences in the earlier part of the poem can hardly be explained by the hypothesis that Catullus used a text varying significantly from what our papyri offer. (It is commonly held that Callimachus added the nuptial rite of 79–88 when he incorporated this poem in the *Aetia*; I cannot see that this explanation does much credit to his judgement: 'A poem of which the αἴτιον is the forming of the constellation Βερενίκης πλόκαμος is not improved by the superposition of an αἴτιον concerning a marriage custom' (Lobel). As regards the end of the poem, either Catullus' MSS. are corrupt, or his model was, or both.)

<sup>25</sup> The heliacal rising of a star or constellation is the date on which it rises immediately before sunrise; some imprecision is inevitable when we are dealing with constellations, because they cover a wider area than individual stars. Dates for the rising and setting of Coma in the mid-third century at the latitude of Alexandria were supplied to Lobel for the ed. pr. of *P. Oxy.* 2258 by H.M. Nautical Almanac Office: see Pfeiffer, *Callimachus*, i. 120. The movements of Venus in 246 B.C. (–245 for astronomical purposes) are calculated from the tables given by B. Tuckerman, *Planetary, Lunar and Solar Positions, 601 B.C. to A.D. 1* (Philadelphia, 1962).

<sup>26</sup> Three are of fourth magnitude, the rest of fifth or sixth. Stars of sixth magnitude are the faintest visible to the naked eye.

<sup>27</sup> His interests being purely astrological, he was content to discover what time the star appeared (*Ev. Matt.* 2.7).

<sup>28</sup> I wonder whether the presence of both the sun and Venus in Virgo at what I believe to be the relevant date is to be connected with the emphasis on Berenice's lost virginity (11 ff., 77 ff., cf. 26), natural enough in a hymeneal context but (as Ellis remarks) a little strange several months after her wedding. The apparent paradox of Aphrodite's star in Virgo might well inspire reflection on the antithesis of maid and wife.

<sup>29</sup> *Ep.* 27; cf. *Arat.* 145–6.

discovery of Uranus, may appear somewhat disingenuous when we realise that no new star swam into Conon's ken. Yet the severer studies to which Callimachus there alludes gave to this ingenious compliment the authority which secured it a place in the traditional list of northern constellations,<sup>30</sup> and the encomium of Conon's services to astronomy is not merely decorative.<sup>31</sup> Nor should we underestimate the implied tribute to the dynasty under whose regime both pure science and literary experimentation could flourish. Callimachus may seem to have chosen a somewhat oblique way to celebrate Euergetes' victories, but those who judge the poem artificial and trivial (and this view is not uncommon) should bear in mind that thanks to Callimachus the story of Berenice's dedication will be remembered as long as stargazers continue to find their way round the night-sky by means of the traditional constellations. So much for the criticisms of the Telchines, who judged Callimachus unequal to *reges et proelia*.\*

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<sup>30</sup> On the rival candidature of the Lesbian Maidens see Wilamowitz, *Hellenistische Dichtung* (Berlin, 1924), i. 217 n. 1. Imitators have not been so successful: who now knows where to look for Lyra Georgii and Scutum Sobieski?

<sup>31</sup> Though Conon is often (rather misleadingly) described by modern writers as 'the court astronomer' or 'the astronomer royal', his mathematical interests are better attested than his astronomical work; it is hard to feel confident that Seneca had evidence independent of Callimachus for his statement (*nat. quaest.* 7.3.3) that Conon compiled a list of solar eclipses from Egyptian records. See further Fraser, *op. cit.* i. 400–1, ii. 580–1 nn. 188–96.

\* I could not have written this article without astronomical assistance from my husband, Martin West, who not only did for me what I envisage Conon doing for Callimachus, but also calculated the movements of Venus during 246 and 245 and saved me from various errors and obscurities. I am also indebted to Adrian Hollis for his comments.