

nulla ducis culpa. . . damna intulissent). Even Tiberius, urging Germanicus' return, allowed that his campaigns had not been insignificant (*satis iam eventuum, satis casuum. prospera illi et magna proelia*). Nevertheless, Germanicus' continued request for a year in which to clean up the German problem seemed to the emperor naive at best, and might have smacked of intended uprising at the head of a victorious army loyal to its general. *Precante Germanico annum efficiendis coeptis*, Tiberius remained firm and the campaign was at an end.

Indications are that to assert Tacitus' idealization of Germanicus is to assume an untenable position. A detailed study of the Tacitean Germanicus may yet decide for the naive and innocent youth or for the clever and dangerous image-maker. Whatever the final judgement on Germanicus' character as portrayed by Tacitus, it seems imperative that in formulating the final judgment one give appropriate weight to the evidence here presented.

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WHEN DID GUARD DUTY END? THE REGULATION OF THE NIGHT WATCH IN ANCIENT ARMIES

Very little information has come down to us on how the duration of night watches was regulated in ancient armies. The earliest evidence is that of Aeneas Tacticus, writing probably soon after 357 B. C. His *Polioretica*, though probably more useful to the besieged general than the *Georgics* are to the farmer in the field, provide scant instructions on keeping the watch. A further account of night watches, in the Roman army in the late fourth century A. D., is provided by Vegetius¹). The difference in the

1) Vegetius, *Epitome Rei Militaris* (ed. C. Lang [Teubner], Leipzig 1885) 3, 8 (pp. 84-5). Cf. J. Clark and T. R. Phillips, *The Military Institutions of the Romans* (Harrisburg 1944, 1965), p. 84.

two accounts is that Aeneas gives more detail, but Vegetius tells us how many watches there were in the Roman army, normally four; the number may have been the same in the Greek practice, but may have varied. Both writers say that a clepsydra was used to measure the watches. Guard duty in daylight may have been timed in some similar way, or perhaps some kind of sun marker, however crude, may have been used, but nothing has been handed down on this topic²). It is clear that night guard duty began at sunset and ended at sunrise, with the resultant complication of dividing the watches, which could be of varying length according to the time of year. It is how the variation was coped with which forms the issue at stake here.

The text of Aeneas on this subject presents some problems. The *Polioretica* has been edited several times in the last century or so, most recently by Alphonse Dain with notes by Anne-Marie Bon³). The passage on the regulation of the night watch is as follows in the Laurentian manuscript⁴):

Ὅν δ' ἂν τρόπον ἴσως καὶ κοινῶς μακροτέρων ἢ βραχυτέρων νυκτῶν γιγνομένων καὶ πᾶσιν αἱ φυλακαὶ γίνονται πρὸς κλεψύδραν χρῆ φυλάσσειν, ταύτην δὲ συμβάλλειν διαδοχῇ μερίδος. μᾶλλον δὲ αὐτῆς κεκηρωῶσθαι τὰ ἔσωθεν καὶ μακροτέρων μὲν γιγνομένων τῶν νυκτῶν ἀφαιρεῖσθαι τοῦ κηροῦ, ἵνα πλεον ὕδωρ χωρῆ, βραχυτέρων δὲ προσπλάσσεσθαι⁵) ἵνα ἔλασσον δέχεται. περὶ μὲν οὖν φυλακῶν ἰσότητος ἱκανῶς μοι δεδηλώσθω. (*Polioret.* XXII, 24–25)

In the third century A.D. Sextus Julius Africanus, the Christian chronographer, made excerpts from the *Polioretica* in his *Κεστοί*. The relevant passage is below:

2) An interesting study of crude sundials on a fortified tower at Obernai in Alsace, where they are marked into the stone and then many times redrawn and much modified by soldiers on guard duty in the sixteenth century and later, might be worth comparison: cf. R. R.-J. Rohr, *Les Cadrans Solaires de la galerie du Kappelturm à Obernai*, *Annuaire de la Société d'Histoire et d'Archéologie de Dambach-La-Ville, Barr, Obernai*, 14 (1980), pp. 71–76.

3) Editions: R. Hercher, *Aeneae Commentarius Polioreticus* (Berlin 1870); A. Hug, *Aeneae Commentarius Polioreticus* (Leipzig 1874); R. Schöne, *Aeneae Tactici de obsidione toleranda commentarius* (Leipzig 1911); The Illinois Greek Club (text by W. A. Oldfather), *Aeneas Tacticus, Asclepiodotus, Onasander* (L. C. L., 1923); L. W. Hunter and S. A. Handford, *ΑΙΝΕΙΟΥ ΠΟΛΙΟΡΚΗΤΙΚΑ* (Oxford 1927); A. Dain and A.-M. Bon, *Énée le Tacticien Polioretique* (Budé, Paris 1967). All editions are referred to below by the editor's name.

4) MS. Florentinus Medicus-Laurentianus Plut. LV. 4 (circa 950–960), ff. 159v – 181v = M (the source of all other extant mss. of the work).

5) *προπελάσσεσθαι* M, *emendatum ex J. Africano* (vide infra). M has *γιγνομένων* rather than *γυνομένων*, both times.

Κλεψύδρα πάνυ χρήσιμον κτήμα πρὸς τοὺς νύκτωρ φυλάσσοντας, μακροτέρων ἢ βραχυτέρων νυκτῶν γινομένων· αὕτη δὲ συμβάλλεται οὕτως. χρῆ κεκηρῶσθαι αὐτῆς τὰ ἔσωθεν καὶ μακροτέρων γινομένων τῶν νυκτῶν ἀφαιρεῖσθαι τοῦ κηροῦ ἵνα πλέον ὕδωρ χωρῆ, βραχυτέρων δὲ προσπλάσσεσθαι, ἵνα ἔλασσον δέχεται. τὴν δὲ ταύτης ὀπὴν ἀκριβῶς δεῖ ποιεῖσθαι, δι' ἧς τὸ τῆς προθεσμίας ὕδωρ ἐκρεῖ⁶).

Africanus has modified the first sentence and gratuitously added a fairly obvious point at the end – that the clepsydra must be made accurately. In the first extract a lacuna was (perhaps unnecessarily) posited between γίνονται and πρὸς by H. Schöne⁷) and πάντως to fill it in part offered by R. Schöne⁸). It is, however, the second part of the first sentence, after ταύτην, which has caused the most embarrassment to editors. Several have not liked the phrase as it stands. The first emendation was that of Hercher, who would read ταύτην δὲ μεταβάλλειν διὰ δέχ' ἡμερῶν⁹), meaning something like 'alter it in the course of ten days'. This seems to have inspired Diels¹⁰) to suggest as an improvement ταύτην δὲ συµμεταβάλλειν διὰ δεχημερίδος – 'change it simultaneously in the course of a ten-day period'. This reading has found acceptance in the editions of the Illinois Greek Club and Dain. We might notice, however, that Julius Africanus read συμβάλλειν or something like it, and not μεταβάλλειν, and probably not συµμεταβάλλειν. The text was either συμβάλλειν or a corruption of (perhaps) one of the posited readings of Hercher or Diels, by the date of Julius Africanus¹¹). Whatever the text read in Aeneas, whose text, as given in the Laurentian manuscript, is in any case notoriously problematic, Julius seems to have had trouble with it from some cause, as he has understood συμβάλλειν to mean 'put together, construct'¹²).

Can the phrase in the Laurentian manuscript make sense? The words before the enigma mean:

6) Julius Africanus, 48; text in L. C. L., tom. cit., p. 208, in ed. Dain, p. 94.

7) See ed. R. Schöne, p. 55, app. ad 979.

8) Ibid.

9) Cf. Schöne, loc. cit.

10) H. Diels, *Antike Technik* (2nd ed., Berlin 1920; Osnabrück 1965), pp. 195–196, n. 1.

11) Cf. ed. Hunter, p. xlii.

12) Cf. Συμβάλλω in C. B. Hase, G. Dindorf, L. Dindorf, *Thesaurus Linguae Graecae*, VII (Paris 1829), col. 1046, esp. "sed pro Connecto, Contexo, ex Philostr. Her.: Συμβάλλω στέφανον ἐκ λειμώνος" [= recte, Heroicus, p. 5, l. 22, ed. L. De Lannoy (Teubner, Leipzig 1977): οὐδ' ἂν στέφανόν τις ἐκ λειμώνος ἀκηράτου ξυμβάλοι].

‘You must attend to the method by which the watches may be equal and the same for everyone, as the nights become longer or shorter, against a water-clock, and...’ and do something to it. Συμβάλλειν can mean ‘to bring together’, ‘unite’, ‘compare’ as a transitive verb, or ‘fit’ as an intransitive (LSJ) and thus might be understood as meaning ‘adapt to’. Διαδοχή is a common military expression meaning a relief, relay, as of a guard. It is thus used by Xenophon (Cyr. 1.4.17; cf. LSJ, s.v. II, 1). But what does μερίδος mean? Μερίς basically means a ‘part’ or ‘portion’ (LSJ): Hunter thought that it meant “a division, or rather a section, of troops, for the more usual μέρος”; “it is found”, he says, “of a faction of citizens in Plato and Demosthenes”. Hunter was doing his best not to emend the text at all. However, this does not seem very convincing. Why say μερίς when μέρος is meant? Equally it is difficult to corrupt μέρος into μερίδος. Yet it may be that μερίς refers not to the men but to the portion of the night which forms the watch. It is thus synonymous with the temporal aspect of φυλακή, and perhaps Aeneas used μερίς rather than φυλακή to emphasise this time factor. We already have a word for ‘relief, relay’ in διαδοχή. The whole phrase could thus be translated ‘[you must] adapt the clepsydra to a relief period’ (verb transitive) or ‘the clepsydra [must] fit a relief period’ (verb intransitive), the sense of which is ‘start it when the period for the next watch begins.’

It is worth noticing that in 1675 Gronovius¹³⁾ suggested taking συμβάλλειν in the sense ‘conicere’, ‘susplicari’ (cf. LSJ, s.v. III.3). He then interpreted the passage as “pro anni tempore cognita habentes noctium spatia auguremur et coniecturemus ex aquae perlapsae mensura, quartam partem noctis, hoc est vigiliam unam praeteriisse, ac differentiam longitudinis vigiliarum accomodemus et adaequemus ad divisionem in clepsydra”. This method is perhaps possible, though difficult to conjecture accurately. It does not account for διαδοχῆ μερίδος but does help with μάλλον δὲ... ‘but rather have the inside waxed...’.

This remaining part of the passage, from μάλλον, must be examined in detail if we are to offer any interpretation of what Aeneas is saying. The first words, μάλλον δέ, seem to imply a course of action preferable to that involved in ταύτην..., namely to regulate the clock by the use of wax. Perhaps, however, μάλλον

13) The note of Jacobus Gronovius is conveniently set out in Supplementum Editionis Polybii Schweighauseranae... ed. I.C. Orellius (Leipzig 1818), pp. 195–6. Gronov was the first person to make use of the Medicean manuscript.

only implies a recommended course of action. This business of the wax seems not to have been understood or at least not clearly explained previously. The words μᾶλλον το δέχεται must mean:

‘But rather you should have the inside waxed and when the nights get longer you should take some of the wax away so that (the clepsydra) holds more water, but when they get shorter apply more so that it takes less.’

It is also possible to take χωρῆ as intransitive with πλέον ὕδωρ as its subject, in which case we read it as ‘so that more water runs’, but it is not possible to take δέχεται as a passive.

One thing is immediately clear: Aeneas is not describing one of the pot-type clepsydrae used to regulate speeches or plays and other entertainments at Athens¹⁴). The forensic type was a terracotta jar with a hole near the bottom. One example of this type of clepsydra has been excavated and dates to c.400 B.C.; after filling it runs for six minutes¹⁵). Apart from the fact that certain modifications would be necessary to make such a device run for several hours, we may ask what the function of the wax was in regulating such a device. The only way of controlling the flow of water is by blocking up the outlet, and to do this with any accuracy to a varying degree according to the brevity or length of the nights would be well nigh impossible.

A clepsydra of the type which Aeneas means is described by [Aristotle] in one of the *Problemata* (XVI, 8) with reference to a statement by Anaxagoras. This sort of clepsydra consisted of a κωδία (a bulbous head, like a poppy head or garlic bulb) from which rose an αὐλός or tube which could be blocked (ἐπιλαβεῖν). In the side of the κωδία opposite to the αὐλός were perforations (τρυπήματα) forming an ἠθμός or strainer¹⁶). [Aristotle]’s description involves two experiments with this clepsydra. In the first case the water clock is set on the surface of water (in another vessel) and the water percolates into it via the perforations. This is quite clear because he says that if the tube is blocked no water will enter, the

14) E. g. the prostitute, star of the play the Clepsydra by Eubulus, got her name because she timed her consultations by the water-clock (Athenaeus, Deipn. 13, 567 c–d); cf. Athenaeus, Deipn. 11, 497b – elephants perform to the tune of the water clock (πρὸς κλεψύδραν). See references in S. Young (article cited in next note), pp. 275–6, no. 6.

15) S. Young, An Athenian Clepsydra, *Hesperia* 8 (1939), pp. 274–284; H. A. Thompson & R. E. Wycherley, *The Agora of Athens* (= *The Athenian Agora*, XIV; Princeton 1972), pp. 52, 55, 202.

16) There is an illustration in Diels, *op. cit.*, p. 192, Abb. 66.

reason being, of course, that no air can escape the bulb to be replaced by water. However, if the clepsydra – with its tube still blocked – is tipped sideways, the water enters. This will be because some of the perforations have become exposed and allow passage for the air which is displaced by the water entering from below.

In the second experiment the clock is taken out of the water and its bulb filled with water. The device is then inverted and the tube unblocked. After a short lapse (while the air in the tube moves round the water in the bulb and out of the base holes, now at the top of the inverted instrument) the water flows out down the tube. If the clock (bulb and tube) is filled completely and inverted, the water runs straight out when the tube is opened. This is because there is no air below the body of water. We need not consider here [Aristotle]’s detailed explanation of this phenomenon: we are only concerned with the form of the instrument. The *Problemata* are sometimes held to be a work not of Aristotle himself but of his school, perhaps even a composition of late antiquity¹⁷). However, the same instrument is alluded to earlier in the *Problemata* (II, 1, 26) and in the *Physica* (213a) and is described in a citation from Empedocles in the *De Respiratione* (7.473b–474a)¹⁸).

What then of Aeneas and his wax? Is the wax solid and to be used as a space-filler and so reduce the internal volume of the clepsydra? If so why not use stones or some other accessible substance? Why wax and how was it used?

Surely one of the essential properties of wax is that it is light in weight and plastic when warm, especially if it is beeswax or the sort of wax used on writing tablets. In view of its lightness its use must have something to do with not affecting the weight of the vessel into which it was placed, otherwise a decrease in capacity would be outbalanced by an increase in load. That would be the case with stones. Hunter in his commentary on the *Poliorcetica* sees the clepsydra as hung up so that the water drains out; of course if this were so, something placed inside the bulb would affect the volume of water to be lost before the device ran out and time was up. However stones might just as easily, and in fact more readily, be used. On the other hand in [Aristotle]’s experiments it

17) Cf. *Problemata*, ed. E. S. Forster (= *The Works of Aristotle*, ed. W. D. Ross, VII; Oxford 1927), p. vii.

18) = Empedocles Fr. 100 DK (= 453 Kirk & Raven).

is fairly clear that the customary way to use this type of clock was as a sinking measure. In the second experiment he describes it in a perverted, or rather inverted, reversed use merely to demonstrate what happens when water is held in the clock. If we accept that the clock is made to sink it is not hard to see why wax was a suitable regulating medium, or how to employ it as such.

It could prove difficult to adjust the volume of wax put inside the bulb to retain an equal distribution of the time over the several watches of the night. However, if the wax were used merely to block off some of the perforations or unblock them as the nights grew shorter or longer, we might make some sense of what Aeneas is telling us. Every so often an adjustment would be needed, and perhaps a clepsydra for this purpose might have had a fixed number of holes and one was blocked or unblocked with wax after a known period of days to keep pace with the change in length of night. In the latitude of central Greece, say¹⁹⁾ about latitude 40° North, if there were as in the Roman army four watches, then at midsummer, when the night is nine hours long, a watch would be of duration two-and-a-quarter (equinoctial) hours; in midwinter, when the period of darkness was fifteen hours long, a watch would last three-and-three-quarter (equinoctial) hours, an hour and a half longer. Sufficient holes would be needed to provide this differential in a graduated way.

There is, however, an irrefutable drawback to this theory. In the winter nights the time of a watch would be longer and so the clepsydra would need to sink more slowly, and vice versa in the summer. We should therefore need to *add* more wax in the winter an *remove* some in the summer, yet the reverse is what the text bids us do. Besides which a carefully calibrated sieve and its correct modification seems to be asking a lot of the instrument maker and the soldier even without improper conduct. It would be awkward to make sure that the watches were all the same and fairly apportioned, as Aeneas says the object of our exercise is, if the keeper of the clepsydra has to regulate single portions of the night to end up equal. If the watches are marked by the end of the sinking process of the clepsydra the opportunities for interfering

19) I choose this example on the assumption that Aeneas was Aeneas of Stymphalus in Arcadia, general of the Arcadian League in 367 B. C. (cf. Xenophon *Hell.* 7, 3, 1; L. C. L. ed. of Aeneas, p. 7), but the difference in latitude, and hence of the duration of night, over Greece is not great enough to have a significant effect on the argument whenever we choose. In this reckoning δ is taken as 24°.

with the timing of individual watches clearly exist, but such a system can hardly be 'soldier-proof'.

Surely the most natural and obvious aspect of the night watch is that it begins at sunset and ends at sunrise, both moments which are determinable from observation with reasonable accuracy much of the time in Mediterranean countries. If the clepsydra were to run not for one watch at a time, but for the whole night, it would be an easy matter for the operator to see each day whether it was running too fast or too slow and hence modify its working by the empirical adjustment of the wax. We should therefore envisage the wax as placed within the instrument, which must have been in two parts to enable it to be opened up for the purpose. Wax, having little weight, would not affect the sinking of the vessel but only influence how soon the water level inside it was sufficient to sink it and hence mark the end of the period to be measured.

This being so, how were the watches measured and what are we to make of the text of Aeneas just after ταύτην? If the clepsydra were to run all night it would have to be marked off into parts for the watches, and when it had sunk to each level the clock keeper would have to give the signal to change the guard. If, for want of other evidence, we assume that the watches were four in number²⁰), some interesting implications may arise from the text.

If we consider the phrase from ταύτην there is nothing to be said about ταύτην itself, for, unless there is a lacuna just before it, which there is no reason to posit, it must refer to κλεψύδρα. The next word, συμβάλλειν, we shall leave as it is, since it is quite evident that Africanus read it or something like it, even if he did not clearly understand what followed and hence modified it, omitting its concomitants. It is, of course, still possible that he was mistaken or that Hercher or Diels may have offered the correct reading for this word. We then come down to διαδοχῇ μερίδος as crucial to the meaning. It could be that Hercher and Diels were right in their conjectures, though they do not seem to have appreciated, or at any rate adequately explained, the use of the wax. Regulation by addition or subtraction of wax was, according to them, to occur every ten days. Why they think Aeneas should have said *ten* days, other than from textual arguments, is not

20) In Homer Il. 10, 251–2, Odysseus may be speaking of thirds of the night or of watches (cf. Od. 12, 312). See generally W. Kubitschek, Grundriss der antiken Zeitrechnung (Munich 1928), p. 188.

clarified: perhaps it is to be taken as a merely arbitrary amount. Hercher's change of διαδοχῆ to διὰ δέχ' ἥ – is palaeographically very plausible, but ἡμερῶν into μερίδος is less likely – why not just μερῶν? Diels' ingenious conjecture is open to objection in that δεχημερίς is apparently not found in any classical (or even Byzantine) author²¹).

Yet presume there were four watches and that μερίς represents the temporal aspect of the watch. Should we not expect Aeneas to say here something like 'construct the clepsydra marked into four divisions'? Suppose that Aeneas, or a copyist, wrote 'four' as a cipher rather than as a word – perhaps not what is found in every literary papyrus, but this is a practical handbook text. Suppose also that he used μερίς for 'division'. We might then expect to have seen Δ ΜΕΡΙΔΕΣ in some grammatical case after a preposition. Any conjecture must take the place of the words διαδοχῆ μερίδος. In the first instance we might therefore retain the δια of διαδοχῆ. The text could thus have been, in uncials, ΔΙΑ Δ ΜΕΡΙΔΩΝ, meaning 'through, by, by means of, four parts'. However if ΜΕΡΙΔΩΝ had actually been the original reading, as we have already seen, this would not readily have been corrupted into ΜΕΡΙΔΟΣ. An accusative plural ΜΕΡΙΔΑΣ might more plausibly allow alpha to be read as omicron. The preposition διὰ, on the other hand, requires a genitive, not an accusative, in this sense. In papyri, ΔΙΑ can be abbreviated by delta with a stroke above it: equally ἄΝΑ, frequently used distributively with numerals, was represented by alpha plus a stroke²²). This preposition, of course, governs the accusative. What if the text of Aeneas had originally read ἀνά τέσσαρας μερίδας, abbreviated in uncial to Α Δ ΜΕΡΙΔΑΣ?

The alpha for ἀνά is easily misread as delta, since if the horizontal bar is drawn low the distinction in uncial script between these two three-sided letters can be slight²³). If this corruption of

21) Possibly a reference to ἐφημερίς, the general's journal of campaign, as of Alexander the Great and later Caesar's Commentarii (cf. LSJ s.v.), is concealed, but this seems unlikely.

22) Cf. e.g., F.G. Kenyon, *Abbreviations and Symbols in Greek Papyri, The Palaeography of Greek Papyri* (London 1899), p. 153 = A.N. Oikonomides, *Abbreviations in Greek...* (Chicago 1974), p. 128; P.W. II A (1923) s.v. Siglae (Papyri), coll. 2294–6 [Bilabel], and K. McNamee, *Abbreviations in Greek Literary Papyri and Ostraca*.

23) Cf. the well-known confusion of ΣΧΕΤΑΙΑ into ΕΧΕΤΑΙΑ at Plato, *Gorg.* 467b: see M.L. West, *Textual Criticism and Editorial Technique* (Stuttgart 1973), p. 29.

A(NA) into Δ(IA) occurred, the accusative of the noun could very probably have slipped by misreading into the usual prose-style genitive to make better sense. We thus have Δ Δ ΜΕΡΙΑΔΟΣ, where Δ was perhaps read as an ordinal: διὰ τετάρτης μερίδος. There were two systems of numeration in use in Classical Greece, the alphabetic and the acrophonic. Delta in the former means four, but in the latter ten. Perhaps a copyist has transcribed the delta as ten, Δ(ε-κα), in the mistaken belief that Aeneas had been using the acrophonic system of the Athenian Tribute Lists²⁴). This error might have been induced by a later scribe's consciousness that he had an old manuscript, since Aeneas was probably not the subject of any Alexandrian scholarship²⁵), and a consequent assumption that the numeral would be in the old Athenian style. Perhaps more likely is that the cipher was used at a time later than the fourth century B. C., but that a subsequent scribe, assuming it went back to Aeneas, understood it as an acrophonic numeral sign and wrote it out in full as ΔΕΚΑ. It is equally possible that a copy of the work was at some stage made in a documentary hand, where acrophonic numerals have been known from other examples²⁶) to creep into the text; Aeneas' book may at some time have been treated not as a work of literature, but as a document.

At all events our theory requires that some later scribe read Δ Δ as ΔΕΚΑ. The juxtaposition of ΔΙΑ/ΔΕΚΑ/ΜΕΡΙΑΔΟΣ, making no sense in itself, can then easily give rise to a rationalisation, ΔΙΑΔΟΧΗ ΜΕΡΙΑΔΟΣ. We might then wonder if the text had orig-

24) Cf. the famous problem of the duration of the siege of Ithome in Thucydides 1, 103, 1, where Krüger proposed reading τετάρτω for δεκάτω (Δ = 4 later style misread by very early copyists and Ephorus as the contemporary Δ = 10). On this see A. W. Gomme, *A Historical Commentary on Thucydides*, I (Oxford 1945), pp. 302–303, 401–411, esp. 404 and 410–411. However, the development of the two systems was, it seems, as follows. The acrophonic system was in use at Athens from the mid-fifth to the first century B. C. The alphabetic system, first invented in Asia Minor in the eighth or seventh century B. C., is first found in Athens in the third quarter of the fifth century (IG I². 760) and at Halicarnassus about the same date (SIG³ 46 – where, however, both systems are used): it did not become general until the third century B. C. See G. De Ste Croix, *Greek and Roman Accounting* (London 1956), pp. 50 ff., esp. 52–4. Thucydides probably wrote Δ = 10, but if he did write Δ = 4 Ephorus may well have read it as Δ = 10. A similar error is said to occur in Demosthenes 6, 22; but note the caveat of K. J. Dover in CR, n. s. 7 (1957), pp. 24–5.

25) Cf. ed. Hunter and Handford, p. xl.

26) Cf. E. G. Turner, *Greek Manuscripts of the Ancient World* (Oxford 1971), p. 18, on a Strabo papyrus.

inally read (in full) $\chi\rho\eta \dots \tau\acute{\alpha}\upsilon\tau\eta\nu \sigma\upsilon\mu\beta\acute{\alpha}\lambda\lambda\epsilon\iota\nu \acute{\alpha}\nu\acute{\alpha} \tau\acute{\epsilon}\sigma\sigma\alpha\rho\alpha\varsigma \mu\epsilon\rho\acute{\iota}\delta\alpha\varsigma$, meaning 'you must put the clepsydra together with four divisions in each case'. $\acute{\alpha}\nu\acute{\alpha}$ was a preposition which, except for its distributive sense, where $\kappa\alpha\tau\acute{\alpha}$ came to replace it, became obsolete in the $\kappa\omicron\iota\nu\eta$ and was already infrequent in Attic Greek. The use of it in the sense suggested is paralleled in Polybius and nearly so in Xenophon. Employment of the word in this way by a writer such as Aeneas, whose Greek is considered to be less literary than the Attic models and to shew the beginnings of the $\kappa\omicron\iota\nu\eta$ dialect, is quite feasible²⁷). To summarise: the text may have passed through the following forms and corruptions:

- 1 ANA ΤΕΣΣΑΡΑΣ ΜΕΡΙΔΑΣ
- 2 Α Δ ΜΕΡΙΔΑΣ
- 3 Δ Δ ΜΕΡΙΔΟΣ
- 4 ΔΙΑ ΔΕΚΑ ΜΕΡΙΔΟΣ
- 5 διαδοχῆ μερίδος

Perhaps, however, Aeneas is only giving the bare bones of a description of the clepsydra for the sake of completeness. He may never have used one to regulate the night watch himself. If his comrades-in-arms could see what he seems to have written in the received text, they would probably not have trusted him to do so.

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27) Examples from Xenophon (and NT) in LSJ⁹ s. v. C. III. Cf. also Xen. Anab. 3, 4, 21; 4, 6, 4; Polybius 2, 10, 3; 2, 24, 13; 3, 104, 4; 6, 35, 5 and the later examples in C. B. Hase, G. Dindorf, L. Dindorf, *Thesaurus Linguae Graecae*, I (Paris 1829), coll. 301–2. On the loss of the preposition in $\kappa\omicron\iota\nu\eta$ Greek cf. F. Blass and A. Debrunner, *A Greek Grammar of the New Testament and Other Early Christian Literature*, transl. & revised by R. W. Funk (Cambridge and Chicago 1961), §§ 204, 248 and A. N. Jannaris, *An Historical Greek Grammar* (London 1897), §§ 1497–1500.

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