NOTES AND DISCUSSIONS

THUCYDIDES 1, 74, 1 AND THE USE OF ΈΣ WITH NUMERALS

THUCYDIDES 1, 74, 1

At Thucydides 1. 74. 1 some Athenian ambassadors speaking to a meeting of the Peloponnesian League at Sparta in 432 are made to boast of the outstanding contribution their city had made to the repulse of Xerxes:

τρία τὰ ὡφελιμώτατα ἐς αὐτὸ παρεσχόμεθα, ἀριθμόν τε νεῶν πλεῖστον καὶ ἄνδρα στρατηγὸν ξυνετώτατον καὶ προθυμίαν ἀοκνοτάτην. ναῦς μέν γε ἐς τὰς τετρακοσίας ὀλίγῳ ἐλάσσους τῶν δύο μοιρῶν, Θεμιστοκλέα δὲ ἄρχοντα . . . προθυμίαν δὲ καὶ πολὺ τολμηροτάτην ἐδείξαμεν. . . .¹

Gomme, in his note on this passage, raised three questions regarding the numerical justification here offered of the claim that Athens contributed "the largest number of ships" to the war effort. (1) If the speaker (i.e., Thucydides) had in mind Herodotus' figure (8. 43–48 and 82), namely, a total of 378 Greek ships at Salamis, of which 200 (180 manned by Athenians and 20 lent to the Chalcidians) were Athenian, is it too much of an exaggeration for an orator to say that the Athenians contributed "a little less than two-thirds" of the whole fleet (given in round figures as 400 ships)? (2) Should it concern us that Thucydides gave the total as

1. All quotations from Thucydides not otherwise attributed are from H. S. Jones's OCT, emended and argmented by J. E. Powell (1942).

2. The variant reading $\tau \rho \iota \alpha \kappa \sigma i as$ appears in some manuscripts; see J. Classen and J. Steup (eds.), Thukydides, 8 vols. (Berlin, 1892–1922), and A. W. Gomme, A. Andrewes, and K. J. Dover, A Historical Commentary on Thucydides, 4 vols. (Oxford, 1945–70), ad loc. If that is what Thucydides wrote, then he was following the Aeschylean (see n. 3) rather than the Herodotean tradition. There is no conclusive paleographic argument to decide the question: if Thucydides wrote $\tau \rho \iota \alpha \kappa \sigma i as$, the variant $\tau \epsilon \tau \rho \alpha \kappa \sigma i as$ will have arisen from an editor who wanted to make him agree with Herodotus; if the original reading was $\tau \epsilon \tau \rho \alpha \kappa \sigma i as$, one can assume that an editor corrected this to $\tau \rho \iota \alpha \kappa \sigma i as$ to agree with Aeschylus and the authors who followed him. Note, however, that if Thucydides' orator thought that the total number of ships was 300, then his description of the Athenian contingent as $\delta \lambda i \gamma \omega \epsilon \lambda \alpha \sigma \sigma \sigma i \alpha \kappa \delta i \omega \rho \alpha \rho \alpha \sigma i \alpha \delta i \delta i$ total makes sense only if he excluded the 20 ships lent to the Chalcidians, thus reducing the Athenian contribution to only 180. That an orator in a mood of patriotic exaggeration should have neglected to include every ship that Athens could possibly claim seems unlikely, and decisive in favor of $\tau \epsilon \tau \rho \alpha \kappa \sigma i \alpha s$.

Herodotus' figures have provoked much discussion in themselves, because the first four contingents are the same in the lists for both Artemisium and Salamis (8. 1 and 8. 43-48) and because of the discrepancy in the latter passage between the sum of the individual contingents detailed (366) and the total given by Herodotus (378); see R. W. Macan (ed.), Herodotos: The Seventh, Eighth & Ninth Books (London, 1908), ad loc., for possible solutions to this problem. Dispute has also focused on whether Aeschylus, who gave 310 as the size of the whole Greek fleet at Salamis (Pers. 338-40; see n. 3), is to be believed in preference to Herodotus. C. Hignett, Xerxes' Invasion of Greece (Oxford, 1963), pp. 209-10, and A. R. Burn, Persia and the Greeks (London, 1962), pp. 441-43, are both inclined to accept the suggestion of W. W. Tarn, "The Fleet of Xerxes," JHS 28 (1908): 219, that the figures in the list at Hdt. 8. 43-48 are "campaign totals, the sum total of the individual ships of each state commissioned during the summer of 480 B.C." If this is correct, then Aeschylus' 310, which Tarn, Hignett, and Burn all calculate to be approximately correct on other grounds, can be accepted without hesitation as the total for the Greek fleet at Salamis. The orator in Thucydides, who was speaking in general terms, naturally referred to Herodotus' campaign total (378) rather than to the figure (310) attached specifically to Salamis by Aeschylus.

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400 ships, while Aeschylus, Demosthenes, and Nepos gave it as 300?³ (3) What exactly is the construction of ναῦς . . . ἐς τὰς τετρακοσίας ὀλίγω ἐλάσσους τῶν δύο μοιρῶν?

Gomme argued that neither (1) the degree of exaggeration in this statement (200 is only 53 percent of 378) nor (2) the existence of another, lower, figure in some accounts was sufficient reason to doubt the correctness of the text. The grammatical question (3), however, he found problematic. In fact, he pronounced the text on this ground unacceptable, and suggested two possible emendations. His comment shows that he took is the text of modify $\nu a \hat{v}_s$, a reading that causes confusion, as he says, by frustrating the reader's expectation that the first accusative will be the direct object of the verb ($\pi a \rho \epsilon \sigma \chi \delta \mu \epsilon \theta a$, understood from the previous clause). Another difficulty is that, if one takes is a qualifying the numeral ($\tau \epsilon \tau \rho a \kappa \sigma \sigma (a s)$) in the sense of "about," nothing remains to indicate the relationship between the two accusatives ($\nu a \hat{v}_s$). It is $\tau a s \tau \epsilon \tau \rho a \kappa \sigma \sigma (a s)$ in the sense of "about," nothing remains to indicate the relationship between the two accusatives ($\nu a \hat{v}_s$). It is $\tau a s \tau \epsilon \tau \rho a \kappa \sigma \sigma (a s)$ in the sense of "about," nothing remains to indicate the relationship between the two accusatives ($\nu a \hat{v}_s$). It is $\tau a s \tau \epsilon \tau \rho a \kappa \sigma \sigma (a s)$ in the sense of "about," nothing remains to indicate the relationship between the two accusatives ($\nu a \hat{v}_s$).

Gomme's difficulty clearly stemmed from a misconstruction of ¿s. The clause reads satisfactorily if one takes ès not as qualifying τετρακοσίας ("about 400 [ships]") but in its basic meaning of "to" ("... [we supplied] a little less than two-thirds of the ships to the 400 [ships] that constituted the Greek fleet . . . "). This interpretation has been advocated by several editors,4 and must be correct. Others besides Gomme, however, have misconstrued this passage,⁵ and it is worth trying to identify what in its wording should have led people astray. One major problem is the ambiguity of ès when closely followed by a numeral, since in many such cases ès appears to be used, like $\pi \epsilon \rho i$, or $\dot{\omega}_s$, or $\mu \dot{\alpha} \lambda i \sigma \tau \alpha$, to qualify the numeral, in the sense of "about" or "approximately." And the fact that the figure which follows és here (400) was a round approximation of the actual figure (378) made many scholars look for some qualifying word to signal this imprecision. Second, the proportional designation (δλίγω ἐλάσσους τῶν δύο μοιρῶν) attached to the Athenian contingent of the fleet generates an expectation of a partitive genitive specifying the whole fleet. Why did Thucydides not fulfill this expectation by writing vavs (οτ νεῶν) μέν γε τῶν τετρακοσίων όλίγω ἐλάσσους τῶν δύο μοιρῶν (sc. παρεσχόμεθα)? Partly, no doubt, because he felt that such an accumulation of genitives would be con-

^{3.} For the variant reading $\tau \rho \iota \alpha \kappa \sigma \iota \alpha s$ in Thucydides, see n. 2. Aeschylus' total for Salamis (Pers. 338-40) may be either 300 or 310, depending on whether the squadron of ten is taken as part of the 300 or as an addition to it. H. J. Rose, A Commentary on the Surviving Plays of Aeschylus, vol. 1 (Amsterdam, 1957), p. 116, argues for the latter interpretation; H. D. Broadhead, The "Persae" of Aeschylus (Cambridge, 1960), ad loc., for the former. Demosthenes (18. 238) and Nepos (Them. 3. 2) both state that Athens contributed 200 of a total of 300 Greek ships.

^{4.} See J. J. Owen (ed.), Thucydides I-III (New York, 1858), p. 314; Classen-Steup, Thukydides⁵, ad 1. 74. 1. The occurrence of the definite article between έs and the numeral (ές τὰς τετρακοσίας) is another indication that έs here does not qualify the numeral: the definite article does not appear in this position in any of the twenty-six cases of qualifying έs in Thucydides (listed below, n. 14).

^{5.} Both H. Stephanus, Thesaurus Graecae Linguae ab Henrico Stephano constructus, vol. 3, ed. C. B. Hase, G. Dindorf, and L. Dindorf (Paris, 1863), cols. 294-95, and A. Matthiae, Ausführliche griechische Grammatik (Leipzig, 1807), p. 845, cited this passage as an example of ès meaning "about." LSJ", s.v. eis, III. 2, list Thuc. 1. 74. 1 separately, not as an instance of eis meaning "about"; but they group it with Thuc. 1. 100. 1, which surely is an instance of qualifying eis. T. Arnold, The History of the Peloponnesian War by Thucydides (Oxford and London, 1868), ad 1. 74. 1, argued that ès with numbers never means "about" but always "up to" or "as many as," translations which are no less inappropriate in this passage than "about," since they, too, are expressions normally used to qualify numerals (see n. 13).

^{6.} Cf. Thuc. 2. 98. 4, where there is no other genitive to complicate the syntax.

fusing. But he was doubtless influenced also by the run of the previous sentence ($\tau\rho$ ia τ à $\dot{\omega}\phi$ ελιμώτατα ές αὐτὸ παρεσχόμεθα . . .), where παρέχεσθαι is completed by ές αὐτὸ.

Two other passages in Thucydides where ξ_s introduces a numeral without qualifying it (6. 8. 1 and 8. 29. 2) provide an interesting comparison. In these passages, too, the prepositional phrase appears to have been used for greater clarity to replace a simple genitive or dative of the noun. In both cases the obscurity that motivated this change of construction was caused by the word $\mu \iota \sigma \theta \delta s$, which can generate dependent genitives and datives of several types (as, e.g., to denote the recipient of the payment, or the task or the period of time for which he was paid). But in spite of this similarity of construction, 6. 8. 1 and 8. 29. 2 lack the same possibility of confusion as 1. 74. 1, for in neither of them is the figure known to be rounded, and therefore felt to require qualification, nor is the noun to which the figure applies omitted. ξ_s

és AS A NUMERAL QUALIFIER

The confusion evident in the comments of editors and grammarians on the construction and meaning of is at 1.74.1 prompts a more general investigation of how is functions in passages where most would interpret it as qualifying the numeral. First, some general remarks about qualification. A numeral qualifier can be defined as an expression (consisting of one or more words) attached to a figure to indicate that that figure is something other than the precise figure which applied (or applies, or will apply) to any one actual case of the phenomenon described. Qualifiers are of two main types, "approximating" and "comparative," the former naming a figure as being in the neighborhood of the precise actual figure, the latter specifying that the figure mentioned lies above or below the precise actual figure. Thus, if "about 500" people are said to have died in an earthquake, the speaker is expressing the belief that the exact figure lies within a range extending not too far on either side of 500; the extent of the range is not defined, but varies, in practice, with the size of the number mentioned. If, on the other hand, the casualties are said to number "more than 500" or "somewhat less than 500," this comparative qualification signifies that the exact figure is believed to lie within a certain distance of 500, but only on one side of that figure. The simplest cases to interpret of both kinds of qualification are those where the speaker is clearly mentioning one figure (qualified) as a compromise among several different figures, as when he gives an average figure (e.g., that for the

^{7.} This was Classen-Steup's explanation. Gomme, while denying that Thucydides would have taken such steps to avoid two genitives (on the rather insufficient ground that he did not do so at 1. 75. 1), apparently agreed that he would have expected a partitive genitive here.

^{8.} Abτό has no definite antecedent, but refers generally to the Greek victory over Xerxes. Other examples of παρέχεσθαι ἐς (or εἰs) with a noun denoting the group to which something was supplied are Thuc. 6. 83. 1 (another Athenian orator alludes to the same episode in Athens' history in very similar terms, substituting "the Greeks" for "the 400 ships" as the object of ἐς) and Xen. Anab. 6. 2. 10 (. . . μηδεμίαν δύναμιν παρεχόμενος εἰς τὴν στρατιάν—the closest parallel to Thuc. 1. 74. 1).

^{9.} Cf. Thuc. 1. 143. 2 and 8. 97. 1 for other solutions to the same problem. For other passages where Thucydides seems to have altered his syntax to avoid piling up genitives or datives, see Dover's notes ad 7. 28. 3 and 6. 4. 6 (citing 5. 33. 1, where Gomme-Andrewes had not suggested this possibility, 6. 18. 6, and 7. 71. 5).

^{10.} There are problems of text and arithmetic at 8. 29. 2, but they do not affect this argument.

tribute received by Athens annually; at Thuc. 2. 13. 1, $\dot{\omega}_s \ \dot{\epsilon}\pi \dot{\epsilon} \ \tau \dot{\epsilon} \ \pi o \lambda \dot{\omega}$ is an approximating qualifier) or mentions the highest or lowest figure ever reached in a certain circumstance (e.g., the estimate of the maximum time for which people predicted that Athens might withstand Peloponnesian invasions; at Thuc. 7. 28. 3, $ob\delta\dot{\epsilon}\dot{\epsilon}s$. . . $\pi\lambda\dot{\epsilon}o\nu$ is a comparative qualifier). Less straightforward, though more common, are cases where the reference in the speaker's mind to more than one figure is implied rather than stated. He may be indicating the range within which several possible figures in a single instance are felt to lie (e.g., at Thuc. 5. 74. 3, $\pi\epsilon\rho\dot{\iota}$ names 500 as the midpoint in the range of figures considered possible for the Lacedaemonian dead; and at 4. 72. 1, $ob\kappa$ $\delta\lambda\alpha\sigma\sigma\nu$ names 6,000 as the lower limit of the range of possible figures for Brasidas' hoplite troops) or a nodal point near which the exact but uneven figure is known to lie (e.g., at Thuc. 1. 118. 2, $\mu\dot{\alpha}\lambda\iota\sigma\tau\alpha$ names 50 years as the midpoint of a range of periods within which the exact figure, probably 48 or 49 years, lies).¹¹

Most qualifying expressions, in English or in Greek, belong to one of these two major types. Thus, "about," "in the neighborhood of," περί, μάλιστα are approximating qualifiers, whereas "at least," "a maximum of," "almost," οὐκ ἐλάσσους, πλείουs are comparative qualifiers.¹² If we ask, however, to which type the preposition ès belongs, we find ourselves in a difficulty. Es is, of course, a very common preposition, which has many uses; but the one that comes closest to its use as a numeral qualifier is that in which it designates a limit of some kind (e.g., Hdt. 1. 52 ès èμέ, "down to my time"; Thuc. 1. 51. 3 ἡ ναυμαχία ἐτελεύτα ès νύκτα, "the sea-battle drew to an end toward nightfall").13 If is were used to qualify numerals in this "limiting" sense, it would have much the same force as those comparative expressions which name the upper rather than the lower limit of a certain numerical range (like οὐ πλείους or ἐλάσσους). In some passages this is fairly clearly the case, but in others it seems at least doubtful. Furthermore, this interpretation runs counter to the equation that is often assumed between ès as a numeral qualifier and words like μάλιστα, ώς, and περί, which are approximating rather than comparative qualifiers. What are we to make of this apparent contradiction? In order to suggest a solution it will be necessary to examine the twentysix passages in Thucydides (apart from the three already discussed, 1. 74. 1, 6. 8. 1, and 8. 29. 2) where is occurs in combination with a numeral, ¹⁴ and to compare the use of ès here with that of approximating qualifiers such as μάλιστα, ώς, and $\pi \epsilon \rho i$.

There is one passage where & makes sense only if taken in that limiting sense which resembles comparative qualification. At 4. 118. 3, Thucydides quotes a clause of a truce between the Athenian and Peloponnesian alliances stipulating

^{11.} The passages cited in this paragraph are more fully discussed in my paper, "Qualification of Numerals in Thucydides," forthcoming in AJAH 3 (1978).

^{12.} See the paper cited in the preceding note.

^{13.} Cf. R. Külner and B. Gerth, Ausführliche Grammatik der griechischen Sprache, vol. 2.1 (Hannover and Leipzig, 1890), p. 469, on els used to qualify numerals: "zur Angabe des quantitativen Zieles, bis auf, bes. bei ungefähren Zahlangaben." The translations proposed by Arnold, History of the Peloponnesian War, ad 1. 74. 1, of qualifying els, "up to" and "as many as," are of this limiting type.

^{14.} The twenty-six passages are the following: 1. 100. 1, 1. 115. 4, 3. 20. 2, 3. 70. 6, 3. 85. 1, 3. 107. 3, 3. 111. 4, 3. 114. 4, 4. 48. 1, 4. 80. 4, 4. 118. 5, 4. 124. 1, 5. 3. 4, 5. 6. 5, 6. 67. 2, 7. 1. 5, 7. 19. 3, 7. 30. 3, 7. 32. 2 (2 cases), 7. 33. 1, 8. 10. 3, 8. 21. 1, 8. 32. 2, 8. 44. 4, 8. 73. 2.

that the latter shall use oared ships only "up to a burden of 500 talents." This framing of a prescription to apply to all cases of a certain activity for some future period naturally requires neither an exact figure ("500 T"), which would be inappropriately precise, nor an approximate figure ("about 500 T"), which would be inappropriately vague, but a maximum limit, defining a permissible range of figures. A comparative qualifier ("not more than 500 T") would have served equally well. In a second passage $\dot{\epsilon}_{1}$ has generally been glossed with a comparative qualifier. At 4.124. 1, the qualifying expression is $\delta\lambda i\gamma \omega \dot{\epsilon}_{3}$, a combination of words that seems not to occur as a numeral qualifier elsewhere in Thucydides or any other author, but which most editors have interpreted as equivalent to $\delta\lambda i\gamma \omega \dot{\epsilon}_{3}$ and $\delta\lambda i\gamma \omega \dot{\epsilon}_{3}$ in these two passages, then, $\dot{\epsilon}_{3}$ functions more like a comparative than an approximating qualifier.

In the other twenty-four passages the use of ès is harder to categorize. First. there are a number of passages where the figure introduced by is appears to be specified as the total obtained by adding together several groups of people or ships. At 8. 10. 2-3 this is particularly clear because the prepositional phrase, ès èπτὰ καὶ τριάκοντα, makes sense only if taken adverbially to express the result of the action described in the participle ("... the Athenians later manned other ships in addition, to a total of 37 . . . "), instead of adjectivally as modifying and (sc. vaûs). In this sentence the substitution of a simple approximating qualifier (e.g., $\pi\epsilon\rho i$ ἐπτὰ καὶ τριάκοντα) would necessitate the adjectival interpretation of the prepositional phrase, which would change the meaning completely.¹⁶ In seven passages (1. 100. 1, 3. 107. 3, 4. 124. 1 [discussed earlier], 5. 34, 6. 67. 2, 7. 19. 3, and 7. 30. 3) the figure introduced by is modifies a list of two or more nouns, which are summed up by a collective word (e.g., 3. 107. 3 λοχίζει . . . όπλίτας καὶ ψιλούς ξυναμφοτέρους ès τετρακοσίους). 17 Although such summary figures are sometimes given elsewhere in Thucydides either absolutely (e.g., 7. 1. 5 Ίμεραίους δὲ ὁπλίτας καὶ ψιλούς ξυναμφοτέρους χιλίους . . .) or qualified by another word (e.g., 8. 100. 3 διακομίσαντες έκ τε τῆς Κύμης προσεταιριστούς ὁπλίτας ώς πεντήκοντα καὶ τῶν ἐκ τῆς ἡπείρου μισθωσάμενοι, ξύμπασιν ώς τριακοσίους . . . 18), it does seem reasonable to regard the seven passages cited as extensions of that adverbial use of summary is at 8, 10. 2-3 which is not found with any other qualifier. In three other passages (3. 70. 6, 7. 1. 5, 8. 21. 1) either the enumeration of the constituents of the group or the collective word is absent, but a similar summary motivation may perhaps still be inferred for the use of ès.19

- 15. See LSJ9, s.v. δλίγος, IV, and Classen-Steup, Thukydides3, ad loc.
- 16. Most of the manuscripts omit ès in this passage, although it is found in one papyrus (see the OCT apparatus criticus). Most editors have preferred to take the omission as a scribal error (an easy haplography after $\pi\rho\sigma\sigma\pi\lambda\eta\rho\omega\sigma\alpha\nu\tau\epsilon$ s) because the attachment of the number to $\tilde{\alpha}\lambda\lambda\alpha$ s, which would result from the omission of èt, as also from its replacement by $\pi\epsilon\rho i$, would produce a second constituent of thirty-seven ships in addition to those already manned by the Athenians, instead of a total fleet of thirty-seven ships. The smaller total accords better with the other information supplied in these chapters about naval resources on both sides; see Classen–Steup, Thukydides³, ad 8. 10. 2–3.
- 17. At 1. 100. 1, ἐς διακοσίας summarizes not two nouns but the objects of two verbs (είλον . . . καὶ διέφθειραν), which are collected by the adjective, τὰς πάσας.
- 18. Perhaps the use of ws to qualify another figure earlier in this sentence prompted Thucydides to repeat it later in the summary situation.
- 19. Classen-Steup, *Thukydides*³, ad 7. 1. 5, observe that the 1,000 Sicels here mentioned must be the total obtained by adding together several small contingents from different places, perhaps differently armed.

There are three passages in which is qualifying a number occupies a syntactical position used by Thucydides for no other approximating qualifier. In these passages (3. 114. 4, 7. 33. 1, and 8. 44. 4) is introduces not just a numerical adjective, but an adjective plus a noun, and the whole phrase stands in loose apposition to another noun of more general meaning, which it amplifies or further specifies. Thus, at 3. 114. 1, is τριακοσίους ὁπλίτας gives more information about the φυλακή sent out by the Corinthians; at 7. 33. 1, is πέντε ναῦς similarly describes the ναυτικόν of the Geloans; and at 8. 44. 4, is δύο καὶ τριάκοντα τάλαντα specifies the amount of the χρήματα collected by the Peloponnesians. Here, then, it seems likely that is was used primarily because it made possible the addition of numerical information to a statement that would have been syntactically complete without it, though more general in import. I suggest that this use of is an extension of its "summary" function (detected earlier, p. 331, at 8. 10. 2–3, and with less certainty in a slightly different kind of situation in ten other passages).

There are five passages where a figure is qualified by a second qualifying word in addition to έs.²² At 3, 20, 2, 7, 30, 3, and 7, 32, 2, we find έs... μάλιστα, and at 3. 111. 4 and 8. 21. 1, ès . . . τινας. 23 Such combinations of two independent qualifiers occur only eight times altogether in Thucydides, the three cases not involving ès being 3. 98. 4, 4. 8. 6 (both περί . . . μάλιστα) and 1. 18. 1 (μάλιστα . . . καὶ ὀλίγφ $\pi \lambda \epsilon i \omega$). One would like to be able to explain why Thucydides qualified these eight figures doubly and what made him favor ès as the first of the two qualifiers in five of the cases. As regards the second question, it is clear that the normal function of a qualifier in a sentence (i.e., whether it is a preposition, an adverb, or an adjective, and whether it can stand at the beginning of a phrase) will determine generally which qualifiers can be conveniently combined; the combinations found tend to be of a preposition (ès or περί) with an adverb (μάλιστα) or an adjective (τις—note that both μάλιστα and τις are postpositive words). But these grammatical considerations do not explain why Thucydides used is more often than περί, in the prepositional position, or why only is paired with 715. Some light can perhaps be shed on this by a scrutiny of the five cases where is is coupled with another qualifier. Did Thucydides double his qualifiers in order to define with extra

20. At 3. 114. 4, the numeral seems to come rather as an afterthought, at the end of the sentence. At 7. 33. 1 and 8. 44. 4, it appears that Thucydides put first the general word (ναντικόν οι χρήματα), to which the numerical detail was then attached by ès, because he wanted to have a balanced contrast between two or more elements in the sentence. In the former passage ναντικόν τε balanced άκοντιστάς... καὶ ἰππέας; in the latter there is a larger contrast between χρήματα μὲν ἐξέλεξαν and τὰ δ' ἄλλα ἡσύχαζον. Thus, in both these cases the balanced structure of the sentence, once established, dictated the use of a qualifier like ès, which could attach a phrase consisting of numeral + specific noun (namely, ναῦς, τάλαντα) to a more general noun.

21. Thuc. 4. 48. 1 somewhat resembles the three passages just discussed; it, too, has ès introducing a noun as well as a numerical adjective, and the sentence seems to require a similar degree of syntactical independence in the prepositional phrase. If, for example, $\pi\epsilon\rho i$ were substituted for ès, the phrase would attach itself closely to $\tau o i s$ ev $\tau \hat{\phi}$ olehart, in which case this whole group of words would logically have to be taken as the object only of the participles $\xi \xi \alpha \gamma \alpha \gamma \delta \nu \tau \epsilon$ and $\delta \iota \alpha \phi \theta \epsilon i \rho \alpha \nu \tau \epsilon$; thus, in translation, "[The Corcyraeans] escaped notice when they took out and put to death in this way about 60 men of those inside the building." As the sentence stands, however, while $\epsilon s \ldots \delta \nu \delta \rho \alpha s \xi \delta \kappa \nu \tau \alpha \epsilon$ must refer to those killed, $\tau o i s \epsilon \nu \tau \alpha \delta \nu \epsilon \epsilon$ as the taken with both $\epsilon \lambda \alpha \theta \sigma \nu$ and its participles: "[The Corcyraeans] escaped the notice of those inside the building when they took out and put to death in this way up to 60 men [from among them]."

22. Thuc. 4. 124. 1 (see p. 331), where the unique expression $\delta \lambda i \gamma o v$ is appears, is hardly a parallel case, since $\delta \lambda i \gamma o v$ is nowhere found as an independent qualifier.

23. On τis used to qualify numerals, see Classen-Steup, Thukydides³, ad 3. 68. 3, 7. 34. 5.

precision the degree and/or the type of uncertainty or rounding he was attaching to the figure in question?

The doubly qualified figure at 3. 20. 2 refers to an episode in the siege of Plataea, a section of Thucydides' History exceptionally rich in detail of all kinds, including numbers. By putting together all the figures that relate to the garrison at Plataea (2. 78. 3, 3. 20. 2, 3. 24. 2, and 3. 68. 2) and paying careful attention to how they are qualified, one can infer that Thucydides probably obtained firm figures only for (a) the initial strength of the garrison (400 Plataeans + 80 Athenians—these are absolute, and should be precise, figures), (b) those who escaped to Athens, and those who were captured, in the mass breakout during the siege (212 escaped and 1 was captured—these numbers have obviously not been rounded), and (c) the number of Athenians executed by the Peloponnesians after the city surrendered to them (an absolute 25; contrast the qualified, apparently rounded figure for the Plataeans who were executed, οὐκ ἐλάσσους διακοσίων). For the rest, he had the more general recollection of those who escaped to Athens that "a few" had turned back in the attempt. That "roughly half" of those in Plataea withdrew from the escape attempt at the last minute may be Thucydides' own or his informants' estimate. If this is right, then the statement that ès . . . ἄνδρας διακοσίους καὶ εἴκοσι μάλιστα actually left Plataea on the way to Athens is Thucydides' calculation from the 212 + 1 + "a few" (= a minimum of 215) known to him from various sources. In that case, it seems probable that he thought 220 the maximum possible number who initially went over the walls of Plataea, and used ès therefore in its limiting sense to mean "up to" or "to a maximum of" (the usage at 4. 118. 3 and possibly also at 4. 124. 1). He added μάλιστα to show that the figure was arrived at by his own calculations, instead of being supplied directly by an informant.²⁴ As an additional reason for thinking that the figure 220 is the product of a fairly precise calculation, one may note that it is the only one of the twenty figures greater than 100 qualified by is which is not a multiple of 100.

It may be significant that the figure qualified by έs . . . μάλιστα at 7. 30. 3 is a relatively small one (20), which is therefore unlikely to be much rounded. In this case (the figure refers to the Thebans and others who were killed attacking the Thracian raiders who had sacked Mycalessus) we have no information about the size of the group from whom the casualties fell. But since such a low number is bound to be relatively precise, one might guess that here, too, is is used in its limiting sense to name what Thucydides regards as a maximum figure, and μάλιστα once again marks the figure as his own calculation. The other three cases of ès coupled with another qualifier (3. 111. 4, 7. 32. 2, and 8. 21. 1) do not lend themselves to such analysis, for the figures concerned cannot be argued to be especially precise, nor do we have sufficient information to infer how Thucydides might have made his calculations. 3. 111. 4 is interesting, however, for another reason, since the group of casualties among the Ambraciotes and their Peloponnesian allies referred to there by Thucydides himself as ès διακοσίους . . . τινας is alluded to a few pages further on, at 3. 113. 3, by an Ambraciote herald, as numbering διακοσίους μάλιστα: the same figure is cited, but the qualifier is changed. Did Thucydides

^{24.} For this implication of $\mu\dot{\alpha}\lambda\iota\sigma\tau\alpha$, see Dover, Commentary, ad 7. 42. 1, where the figure qualified (73) is so obviously unrounded as to rule out any straightforward approximating interpretation. See also the paper cited in n. 11.

intend to convey a difference of nuance? One cannot tell. Since no obvious reason for such a difference of view between the historian and the Ambraciote herald leaps to mind, one is inclined to think this may be more a case of literary variation, and to deduce from it that $\dot{\epsilon}_5 \dots \tau \iota \nu as$ and $\mu \dot{a} \lambda \iota \sigma \tau a$ here have much the same force. Finally, we may note that two of these passages (7. 30. 3 and 8. 21. 1) have been discussed earlier (p. 331) as cases where $\dot{\epsilon}_5$ appears to perform a summary function. Thus, the nuance expressed by the double qualification may not be precisely the same in all cases.

It is useful to compare the general profile of the qualifier ϵ_5 in Thucydides with the profiles of the most common expressions of the approximating and comparative types ($\mu\dot{\alpha}\lambda\iota\sigma\tau\alpha$, $\dot{\omega}_5$, $\pi\epsilon\rho i$, and $o\dot{\omega}_6$ $\dot{\epsilon}\lambda\dot{\alpha}\sigma\sigma\sigma\nu$, $\dot{\delta}\lambda\dot{i}\gamma\omega$ $\dot{\epsilon}\lambda\dot{\alpha}\sigma\sigma\nu$, $\dot{\delta}\lambda\dot{i}\gamma\omega$ $\dot{\epsilon}\lambda\dot{\alpha}\sigma\sigma\nu$. It will be clear that, although in many respects the three major expressions of each type diverge too much to permit the extrapolation of a "typical" approximating word or a "typical" comparative word with which $\dot{\epsilon}_5$ could be compared, the comparison of $\dot{\epsilon}_5$ with various particular expressions of both types is nonetheless illuminating in many ways.

Take first of all frequency of employment. In general, approximating qualifiers are used three times as often as comparative qualifiers (the total for approximating expressions, excluding $\dot{\epsilon}_s$, is 121 cases, as compared to forty of comparative type), and this generally higher frequency of approximating qualifiers is naturally reflected in the higher frequency of individual expressions of this type. 'Es, used twenty-six times, falls between $\mu\dot{\alpha}\lambda\iota\sigma\tau\alpha$ (47) and $\dot{\omega}_s$ (19), while the commonest comparative expression, obs $\dot{\epsilon}\lambda\dot{\alpha}\sigma\sigma\sigma\upsilon s$, occurs eighteen times; the remaining figures are: $\pi\epsilon\rho\iota$ (12), $\dot{\delta}\lambda\dot{\iota}\gamma\psi$ $\dot{\epsilon}\lambda\dot{\alpha}\sigma\sigma\upsilon s$ (6), $\dot{\delta}\lambda\dot{\iota}\gamma\psi$ $\pi\lambda\dot{\epsilon}\iota\upsilon s$ (5).

Second, in range of employment, it is not surprising that the most general comparative expression, οὐκ ἐλάσσους, is used with the largest range of figures (from 25 to 150,000); this is presumably due to the tendency of such comparative expressions to be used rhetorically, as a means of emphasizing the magnitude of the figure qualified.26 The more specific expressions, δλίγω ἐλάσσους and δλίγω πλείους, are used, as one would expect, with a much more restricted range of figures (from 50 to 1,000 and from 30 to 1,000, respectively). Among the approximating words, μάλιστα has by far the most extended range (from 2 to 6,000); by contrast, $\pi \epsilon \rho i$ is rarely used with large numbers (range: from 13 to 5,000; but all cases except 7. 42. 1 are below 1,000), and $\dot{\omega}_s$ appears with no figure higher than 300 (range: from 6 to 300). These differences in the range of figures with which μάλιστα, περί, and ώς are employed can be explained to some extent by Thucydides' apparent preference for one word or another in qualifying different sorts of numerical information. Thus, μάλιστα is the only approximating word used to qualify figures of all three main types (those relating to time, distance, and groups of fighting men or ships); περί is used only once (in combination with μάλιστα at 4. 8. 6) of distance, while is is never used of time. I suggest that Thucydides generally

^{25.} E. C. Marchant, Thucydides III (London and New York, 1965), ad 3. 20. 2, cites Andoc. 1. 37 as a case where "εἰς τριακοσίους is presently repeated in the form μάλιστα τριακοσίους." In fact, μάλιστα (1. 38) is an insertion into the text made on the basis of a quotation of this passage by Galen; see D. MacDowell (ed.), Andokides "On the Mysteries" (Oxford, 1962), ad loc. (app. crit.). If the emended text is correct, this would be a clear instance of ἐ: and μάλιστα being used more or less interchangeably.

^{26.} On this point, see the paper cited in n. 11.

avoided qualifying distance figures with $\pi \epsilon \rho t$ and time figures with $\dot{\omega}_{5}$ because of the possibility of confusion with other common spatial uses of περί and temporal uses of ωs. Es corresponds most closely to μάλιστα in the range of its figures (from 5 to 2,000), although a much smaller proportion of the figures with & fall in the lower range of the scale (in only two cases does & qualify figures of 20 or less, as compared to fourteen cases for μάλιστα; these figures represent, respectively, 7 percent and 30 percent of the totals for each word). It is significant that thirteen of the fourteen cases of μάλιστα with very low numbers relate to time or distance, types of figures which Thucydides never qualifies with es, no doubt because of the ambiguities that might be generated by the common occurrence of ès in a nonqualifying sense in these contexts (cf. his avoidance of $\pi\epsilon\rho i$ for distance and $\dot{\omega}_{5}$ for time, pp. 334-35). Thus, the distribution of figures qualified by ès corresponds most closely to the distribution of the μάλιστα figures excluding those relating to time and distance. It appears that, when qualifying figures between 21 and 100 relating to groups of fighting men or ships, Thucydides had a strong preference for ώs (10 cases); compare μάλιστα (3), ές (3), and περί (2). Thus, Thucydides did not use all the approximating words in his repertoire interchangeably, but made his selection in each case with regard to some fairly subtle differences of connotation between them. 'Es appears here to correspond more closely to the pattern of approximating than of comparative qualifiers; but it, too, has its own distinctive pattern.

This same picture, of a general difference between most approximating qualifiers and most comparative qualifiers, but still a considerable variation in the employment of individual approximating words, among which is seems to fall, emerges from a study of the degree to which the figures qualified by different expressions cluster at a few points on the scale, and the tendency of certain particular figures to occur very frequently with certain qualifiers. One can obtain a "cluster index" for any qualifier by dividing the number of different figures that appear with it by the total number of occurrences of that qualifier: a low figure will indicate a high degree of clustering, and a high figure the converse. This calculation produces high figures for the three comparative qualifiers, signifying very little clustering (οὐκ ἐλάσσους—17 figures in 18 cases = 94.4; δλίγω ἐλάσσους—5 figures in 6 cases = 83.3; $\delta \lambda i \gamma \omega \pi \lambda \epsilon i o \nu s - 4$ figures in 5 cases = 80.0). The approximating qualifiers show greater variation, ranging from $\pi\epsilon\rho i$, with the highest index (11 figures in 12 cases = 91.6), through μάλιστα (31 figures in 47 cases = 65.9), to $\dot{\omega}_s$, with the lowest index (9 figures in 19 cases = 47.3); and, if one looks at the cases of $\dot{\omega}_5$. one finds in fact that over half of them (10 of 19) involve just two figures, namely, 50 and 300. It thus appears that figures qualified by approximating expressions tend to cluster considerably more than those qualified by comparative expressions. This may reflect only the generally greater frequency of approximating qualifiers (especially as $\pi \epsilon \rho i$, the one approximating word whose cluster index falls in the same range as those of the comparative expressions, is also the least frequently used), or it may show a greater tendency (in Thucydides or his informants) to think in certain stereotyped round numbers when laboring under a general uncertainty or imprecision. 'Es has a cluster index of 61.5 (16 figures in 26 cases), which puts it closest to μάλιστα (65.9), and clearly among the approximating rather than the comparative expressions. A look at the list of figures that

occur more than once with each approximating qualifier discovers very little overlap between them: the only figures qualified more than once by each of two or more qualifiers are 60 (twice each by $\mu\dot{\alpha}\lambda\iota\sigma\tau a$ and $\dot{\epsilon}s$), 120 (twice each by $\mu\dot{\alpha}\lambda\iota\sigma\tau a$ and $\dot{\epsilon}s$), and 300 (twice each by $\mu\dot{\alpha}\lambda\iota\sigma\tau a$ and $\dot{\epsilon}s$, and five times by $\dot{\omega}s$). And each qualifier appears to have its own "favorite" figures: $\mu\dot{\alpha}\lambda\iota\sigma\tau a$ appears four times with 40, three times each with 7 and 400; $\dot{\omega}s$ appears five times each with 50 and 300; $\dot{\epsilon}s$ appears four times with 200 and three times with 500. Some of these patterns can be partly explained by Thucydides' preference for using certain qualifiers with certain types of information: thus, the three cases of 7 and the four cases of 40 qualified by $\mu\dot{\alpha}\lambda\iota\sigma\tau a$ all involve time or distance figures, and $\mu\dot{\alpha}\lambda\iota\sigma\tau a$ is by far the commonest qualifier used with figures of these types. But no such explanation will account for his apparent preference for $\dot{\epsilon}s$ rather than $\dot{\omega}s$, $\pi\epsilon\rho\dot{\iota}$, or $\mu\dot{\alpha}\lambda\iota\sigma\tau a$ with groups of 200 soldiers or ships. One wonders whether euphonic considerations generated by the rhythm and order of words in a particular sentence did not play a part here.

To sum up, a study of the passages where Thucydides uses ès to qualify a number finds two (4. 118. 3 and 4. 124. 1) where is definitely has comparative force, and a few others (e.g., 3, 20, 2, 7, 30, 3) where it may have comparative force. In another group of passages (8. 10. 3 and the ten others cited on p. 331) it seems reasonable to discern another facet of the original "limiting" sense of ès, by which it performs a summary function (meaning something like "to a total of"). So used, although the connection with the comparative use remains clear, is comes closer in force to an approximating qualifier. It seems, however, that in such summary cases, as well as in cases where the phrase containing the qualified numeral was added almost as an afterthought to an already syntactically complete sentence (3. 114. 1, 7. 33. 1, and 8. 44. 4), Thucydides preferred to use is rather than a more straightforward approximating qualifier, such as ώς, περί, or μάλιστα. Similarly, he apparently liked using ès as the first of two qualifiers attached to the same number. But there remain many cases where one can discern no difference in meaning or construction between ès and $\dot{\omega}_{S}$, $\pi\epsilon\rho\dot{\iota}$, or $\mu\dot{\alpha}\lambda\iota\sigma\tau\alpha$. These passages tend to support the common assumption that ès is in many respects merely another approximating qualifier.

that of approximating qualifiers (like $\mu\dot{a}\lambda\iota\sigma\tau a$). This helps to explain why editors and lexicographers have often had trouble in elucidating its meaning and use in particular passages.²⁷

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THEOCRITUS, CALVUS, AND ECLOGUE 6

Of the six unconnected lines surviving from Calvus' epyllion, none is better known than the neoteric exclamation addressed to Io herself (Serv. Dan. ad *Ecl.* 6. 47 = Calvus frag. 9 Morel):

a virgo infelix, herbis pasceris amaris.

We are indebted to Servius Danielis; for, as has been noted, it can be seen that in *Eclogue* 6 Virgil drew from Calvus' line to produce an acknowledgment of previous literary expression. Stewart observes that at *Eclogue* 6. 47 ("a, virgo infelix, quae te dementia cepit!") Virgil combined the first half of Calvus' line with the second half of a verse from *Eclogue* 2 (69 "a Corydon, Corydon, quae te dementia cepit"), a line whose antecedent is Theocritus *Idyll* 11. 72 (& Κύκλωψ Κύκλωψ, πᾶ τὰς φρένας ἐκπεπότασαι;). *Eclogue* 6. 47, then, is a recognition of the poet's literary predecessors, molded into a single Virgilian line.

But what of line 52 of the same poem?

a! virgo infelix, tu nunc in montibus erras.

Virgil does not lightly repeat himself, and we may ask why this line, with the alteration of the second half, reappears after five verses. It is true that there is a structural purpose to the repetition: lines 47-52 are, in fact, a self-contained panel.² But why the change in the second half ("tu nunc in montibus erras")? The motif of wandering is common in the *Eclogues*, particularly in *Eclogue* 6.³ For the moment, however, instances outside this poem will be important. First, *Eclogue* 2. 21:

mille meae Siculis errant in montibus agnae.

As Servius recognized, Virgil drew from, but altered, Theocritus (again the Cyclops poem) at this point:

- 1. Z. Stewart, "The Song of Silenus," HSCP 64 (1959): 190.
- Briefly noted, together with other panels, by F. Skutsch, Aus Vergils Frühzeit (Leipzig, 1901),
 13.
- 3. J. P. Elder, "Non Iniussa Cano," HSCP 65 (1961): 118-19, points to the numerous instances of erra- in the Eclogues, particularly 6. 40, 52, 58, and 64. Is there significance in the distribution—an interval of twelve lines followed by two of six?