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Herodotus Laird, A.G. Studies in Herodotus.



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STUDIES IN

HERODOTUS

By A. G. LAIRD

OF THE UNIVERSITY OF WISCONSIN

MADISON, WISCONSIN





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STUDIES IN

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MADISON, WISCONSIN

- I. The Inscription on the Serpent-Column of Delphi, and its Counterpart at Olympia.
- II. Herodotus, and the Greek Forces at Salamis and Plataea.
- III. The Battle of Salamis.

THE INSCRIPTION ON THE SERPENT-COLUMN OF DELPHI¹ AND ITS COUNTERPART AT OLYMPIA.

No satisfactory explanation has yet been given of the order in which the Greek states stand upon the celebrated monument dedicated at Delphi from the spoils of the battle of Platæa.² As is well known, the monument consisted of a golden tripod, standing upon a bronze column of three intertwining serpents. The inscription begins upon the thirteenth coil from the base, and the names stand in a single column, three upon each coil, with the exception of the fourth and seventh, upon which there are four, and the third, which has but two. The names of the

¹Roehl, I. G. A., 70; Roberts, Greek Epigraphy, No. 259; Cauer, Delectus,² 12; Dittenberger, S. I. G.,² 7; Hicks, Greek Histor. Inscrips., 12; Fabricius, Jahrb. d. k. d. arch. Inst., I (1886). p. 176.

The inscription, as restored by Fabricius, runs as follows:

	Τοίδε τον		Φλειάσιοι	25	Χαλκιδεῖς
	πόλεμον ἔ		Τροζάνιοι		
	πολέμεον	15	Έρμιονεῖς		Στυρείς
					Faλ είοι
	Λακεδαιμόνιοι		Τιρύνθιοι		Ποτειδαιάται
5	` Αθαναΐοι		Πλαταιεῖς		
	Κορίνθιοι		Θεσπιείς		$\mathbf{\Lambda}$ ευκάδιοι
				30	Ε ανακτοριείς
	Τεγεάται	•	Μυκανεῖς		Κύθνιοι
	Σικυώνιοι	20	Κεῖοι		Σίφνιοι
	Αἰγινᾶται		Μάλιοι		
			Τήνιοι		' Αμπρακιώτο
.0	Μεγαρεῖς				Λεπρεάται
	Ἐπιδαύριοι		Νάξιοι		
	Ἐρχομένιοι		Ἐρετριεῖs		
2	Hdt. IX. 81.			,	

Tenians and Siphnians, which stand fourth upon the seventh and fourth coils respectively, are very badly written,¹ and it is admitted that they are later insertions.

The difficulties in the arrangement of names may perhaps best be indicated by stating the chief theories that have been advanced in explanation, and the overwhelming objections to them.

1. Frick² says: "In diesem waren deutlich zwei Gruppen der Festlandstaaten und Inselstaaten gesondert, deren jede mit den unbedeutendsten Mächten (Mykenäer—Kythnier, Siphnier) schloss, und denen beiden gleichsam als Anhang die den übrigen gegenüber in einer Ausnahmestellung befindlichen Ambrakioten und Lepreaten angefügt waren." But in Frick's first group of Mainland states we find Aegina, among his Island states the Eleans, Potidæans, and Anactorians. Further, there is no good reason for the exceptional position of the Ambraciots and Lepreatæ.

2. Rawlinson³ says: "With regard to the order of the names in the inscription, we may remark, that, while it is to some extent irregular, it is not wholly so. In the earlier part the guiding principle is that of the greater importance, which may be traced as far as the seventh or eighth name ———. After this the prevailing idea is the geographic one. First the Peloponnesian states are given; then those of central Greece; then the eastern islanders; finally the outlying states towards the west. The irregularities are difficult to account for: perhaps they arise chiefly from additions (made at one or other extremity of a line) of states omitted at first. Mukaveis at the commencement of line 7, Ποτειδαιâται at the close of line 10, and Κύθνιοι, Σίφνιοι, at the close of line 11, are perhaps such additions." Besides the difficulties admitted by Rawlinson, it may be pointed out that the Eleans and Lepreatæ are Peloponnesian and not "outlying states towards the west" strictly speaking.

¹Fabricius, *l. c.*, p. 183.

²Jahrb. f. kl. Phil., 8 (1862). p. 451.

³History of Herodotus, IV, p. 400.

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3. von Domaszewski¹ holds that the three most important states, Lacedamon, Athens, and Corinth, stand at the head; the rest clearly fall into three groups, the first of which, Tegea to Tiryns, includes the states of the Peloponnesian League, the third group, from Potidæa to Ambracia, contains the Corinthian colonies, and the second group is composed of the states under the leadership of Athens. He holds the Tenians, Siphnians, and Cythnians to be later insertions; the first three names had suggested the apportionment of three to each coil, and the last four (Leucadians, Anactorians, Ambraciots, and Lepreatæ) had been divided, two to a coil. The Lepreatæ, he believes, stand at the end because they did not belong to any of the three groups. This theory is certainly ingenious, but it is not difficult to pick holes in it. Why should the Mycenians and Eleans belong to the Athenian League, or the Thespians for that matter? Fabricius,² too, asserts that there is no reason for assuming the later insertion of the Cythnians, so why should they stand between the Anactorians and the Ambraciots?

It must be admitted that the first seven names, at least, have this position on account of their importance; that from the Epidaurians to the Tirynthians we have an unbroken series of Peloponnesian states, and from the Ceans to the Styrians an unbroken series of Island states. But all attempts at explanation have left us completely in the dark about the following points. (1) Why do the Platæans and Thespians stand between the Tirynthians and Mycenians, two cities so closely connected geographically, and grouped together by Herodotus³ as furnishing at Platæa a combined force of 400 hoplites? (2) Why are the Eleans so strangely placed? The suggestion⁴ that they falsified the record by substituting their own name for that of the Pales (who, according to Herodotus, were present

¹Heidelberger Jahrbücher, 1891. p. 181. I cite from Sitzler's summary in Jahresb. f. Altertumswiss. 83. p. 81.

²Loc. cit., p. 183, footnote.

³IX. 28. 16.

⁴Grote, Hist. of Greece, IV. p. 256.

at Platæa) is the only one that approaches a solution from the geographical point of view, and even then we can not see why the Potidæans should come between the Paleans and the Anactorians. (3) Why do the Cythnians (assuming the Siphnians to be a later insertion) separate the Ambraciots from the Anactorians? (4) Why are not the Lepreatæ (as well as the Eleans) placed among the Peloponnesians?

From the spoils of Platæa there was also erected a monument at Olympia, a bronze Zeus¹ of ten cubits, and upon the base of this, too, the Greek states were inscribed. The original of this inscription has not been preserved, but Pausanias² has given us the list of names. The problem of the Delphian inscription is by no means made easier by a comparison with Pausanias' record, for, while the first seventeen names at Olympia are the same as the first at Delphi, with the omission of the Thespians, and in the same order, except that the Tegeans are in the seventh instead of the fourth place, in the remaining portions the two lists are a mass of strange variations and startling correspondences.

Frick³ offered a correction of the text of Pausanias by filling in the four missing names (Thespians, Eretrians, Leucadians

¹Hdt. IX. 81. 6.

² V. 23: Καὶ αὖτις ὡς πρὸς ἄρκτον ἐπιστρέψαντι ἄγαλμά ἐστι Διός. τοῦτο τέτραπται μὲν πρὸς ἀνίσχοντα ἦλιον, ἀνέθεσαν δὲ Ἑλλήνων ὅσοι Πλαταιᾶσιν ἐμαχέσαντο ἐναντία Μαρδονίου τε καὶ Μήδων. εἰσὶ δὲ καὶ ἐγγεγραμμέναι κατὰ τοῦ βάθρου τὰ δεξιὰ αἱ μετασχοῦσαι πόλεις τοῦ ἔργου, Λακεδαιμόνιοι μὲν πρῶτοι, μετὰ δὲ αὐτοὺς Ἀθηναῖοι, τρίτοι δὲ γεγραμμένοι καὶ τέταρτοι Κορίνθιοί τε καὶ Σικυώνιοι, πέμπτοι δὲ Αἰγινῆται, μετὰ δὲ Αἰγινήτας Μεγαρεῖς καὶ Ἐπιδαύριοι, ᾿Αρκάδων δὲ Τεγεᾶταί τε καὶ ᾿Ορχομένιοι, ἐπὶ δὲ αὐτοῖς ὅσοι Φλιοῦντα καὶ Τροιζῆνα καὶ Ἐρμιόνα οἰκοῦσιν, ἐκ δὲ χώρας τῆς ᾿Αργείας Γιρύνθιοι, Πλαταιεῖς δὲ μόνοι Βοιωτῶν καὶ ᾿Αργείων οἱ Μυκήνας ἔχοντες, νησιῶται δὲ Κεῖοι καὶ Μήλιοι, ᾿Αμβρακιῶται δὲ ἐξ ἡπείρου τῆς Θεσπρώτιδος, Τήνιοί τε καὶ Λεπρεᾶται, Λεπρεᾶται μὲν τῶν ἐκ τῆς Τριφυλίας μόνοι, ἐκ δὲ Αἰγαίου καὶ τῶν Κυκλάδων οὐ Τήνιοι μόνοι ἀλλὰ καὶ Νάξιοι καὶ Κύθνιοι, πελευταῖοι δὲ Χαλκιδεῖς οἱ ἐπὶ τῷ Εὐρίπῳ.

³Loc. cit., p. 454.

and Siphnians), and cleverly shifting the order of the words, so as to agree with the Delphian inscription, but, when the order on the preserved inscription itself is so unintelligible, it is dangerous to correct texts to correspond with it. von Domaszewski here offers another ingenious suggestion, viz., that the names on the Olympian monument were arranged in three columns of nine, nine, and ten;¹ that there was not sufficient room in the third column, and so the last two names (the Ambraciots and Lepreatæ) were placed between the second and third columns; and that the name of the Chalcidians, being perhaps not understood at first by the copyist from whom Pausanias' record comes, was, when deciphered, placed at the end. Apart from the very unsatisfactory attempt to explain the position of the Chalcidians, it might be asked why there was not room in the third column for nine names, as well as in the first and second; in that case only the Lepreatæ would be left for insertion between the second and third columns. But, aside from all this, von Domaszewski's explanation of the Olympian inscription only brings us back again to the difficulties in the Delphian.

Is it possible to find any explanation of the order of names in Pausanias' list, treating it by itself, and paying no attention to the actually preserved monument of Delphi? It may be stated as a certainty that, on a base supporting a statue of ten cubits, thirty-one (or twenty-seven) names would not be written in one vertical column. Is it not possible, or rather, is it not probable, that these columns (whether three or more) were arranged with some attention to an intelligible grouping of the states, and not, as in von Domaszewski's suggestion, to be read through the first column, then the second, and so forth, so as to get the same result as in the single column at Delphi? If this latter view were correct, the $\Phi\lambda a a \sigma \omega$, at the head of the sec-

¹Sitzler's summary does not state which states these twenty-eight are. If they are the same as D.'s assumed twenty-eight for the original form of the Delphian inscription (*i. e.* omitting the Tenians, Cythnians, and Siphnians), how did two of these get into the Olympian list, and what became of the Thespians, Eretrians, and Leucadians in the copy of Pausanias?

ond column, would occupy a more prominent position than the 'A $\theta a v a \hat{i} o i$, in the second position of the first. Is it not more likely that the arrangement was similar to that which we find in the Athenian tribute lists ?¹ The restoration which I have attempted falls into three natural groups, (1) the Peloponnesians, (2) the Islanders, (3) the states of the Mainland outside of the Peloponnesus. Such an arrangement, plausible in itself, amounts practically to a certainty when we consider that it is the same as Herodotus² uses in his list of states that were present at the battle of Salamis. Let us examine first the objections that may be raised to this restoration.

POINTS OF DIFFICULTY.

1. In the list of Pausanias the Thespians, Eretrians, Leucadians, and Siphnians are omitted. There can be no doubt that the Eretrians and Leucadians were inscribed on the Olympian Herodotus³ assigns to them contingents of considmonument. erable size both at Salamis and Platæa. They are not found in Pausanias' list either because of the carelessness of the copyist, or, as I am inclined to think, because they have dropped out of the text. Such omissions of proper names are not uncommon in The Siphnians furnished but one penteconter⁴ to Pausanias. the fleet at Salamis, and they are admitted to have been inserted in the Delphian inscription at a later date than the inscribing of the others. It is probable, therefore, that, since they are not in Pausanias' list, they were not on the Olympian inscription. The case of the Thespians is more doubtful. Pausanias expressly says II Lataleis de mover Bolwtwv. It is impossible, therefore, to believe that the copyist made a slip; and to believe that the name dropped out is here more difficult, for the μόνοι Βοιωτῶν would not be as much in place if both states were inscribed. Pausanias might as well have used the phrase in connection with

¹Cf. C. I. A. I. 244. &c.

²VIII. 43–48.

⁸VIII. 45. 3; 46. 7; IX. 28. 19, 22.

⁴Hdt. VIII. 48. 4.

ERVOMENIOI ONEIASIOI KORINO101 SEKNONIOI NAKEDAIMONIO ROTAVIOI ERMIONES *CIDAURIOI TECEATAI* NEFREATAL MAXIOI KV&MIOI TIRV/VOIO VKAMES KEIC ERETRIES STURFS VKIDES OA VAL FIDTEID FAMAK NATAIE **TRAKIOTA** VKADIO TORIES

RESTORATION OF THE INSCRIPTION AT OLYMPIA CONTAINING THE NAMES OF THE GREEK STATES WHICH OVERCAME THE PERSIANS. (Pausanias V. 23.)

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Πελοποννήσιοι (Hdt. VIII. 43.)

ΝησιώταιΟἱ ἐκ τῆςέξω(Hdt. VIII. 46.) $\mathring{\eta}\pi\epsilon \acute{\rho}\rho \upsilon$ (Hdt. VIII. 44.)

the Tegeans and Orchomenians, for there were other Arcadians who went to Thermopyle,¹ and to the Isthmus,² but who did not fight at Platæa. The other case of µóvoi in this passage-Λεπρεάται μέν των έκ της Τριφυλίας μόνοι — is also of the kind in which but one out of a number of cities was represented. The conduct of the Thespians at Thermopylæ,³ in refusing to leave Leonidas like the rest of the allies, certainly entitled them to a place of honor; yet it is a noticeable fact that none of the states present at Thermopyle, unless they were also at Platea, are inscribed on either monument. The Locrians and Phocians⁴ may have been justly omitted, for they later joined the Persians,⁵ though against their will; but why should no mention be made of the Mantineans and other Arcadians, who fought with bravery and success for two days at Thermopylæ,⁶ especially if they were sent away finally by Leonidas, as Herodotus believes.⁷ It would almost seem as if Thermopylæ gave no title to a place on these two rolls of honor.⁸ The Thespians, indeed, were also present at Platea, but "they had no arms."9 Whether Herodotus means by this that they were non-combatants, or merely that they were not hoplites, is not clear, but his way of summing up the 69,500 light-armed men without the Thespians seems to favor the former view. Taking into account this statement of Herodotus with reference to Platæa I am inclined to hold the opinion that the Thespians were not on the Olympian inscription, and that Herodotus is in a way accounting for it. Their insertion in the later inscribed list at Delphi was due to the Lacedæmonians, who took the opportunity both to raise the Tegeans from seventh to fourth place, and to reward the Thespians for remaining with Leonidas.

¹Hdt. VII. 202. ²Hdt. VIII. 72. ³Hdt. VII. 222. ⁴Hdt. VII. 203. ⁵Hdt. IX. 31. 23. ⁶Hdt. VII. 212. 9. ⁷VII. 220. 25. ⁸Cf. [Dem.] Neaera, §97. ⁹Hdt. IX. 30. 2. The variation in the size of the letters from the Tirynthians on may be defended on the ground that it gives the Peloponnesians, apart from the poorly represented Tirynthians, Mycenians, and Lepreatæ,¹ a more prominent place than the minor states outside. The Tirynthians, Mycenians, and Lepreatæ should come below the Træzenians and Hermionians, but lack of room prevented. Lack of room, also, can account for the greater crowding and smaller letters of the rest of the inscription.

3. The Tenians were a later insertion on this as well as on the Delphian monument.

4. The Eleans occur on both monuments. In substituting the Paleans for them, I have returned to a suggestion made many years ago.² The Eleans secured the substitution of their own name in place of the Paleans at Delphi by bribery; at Olympia the change lay in their own power. It was no difficult matter to turn $\Pi AAE\Sigma$ into FAAEIOI. The arguments in favor of this view are, first, the impossibility of accounting for the position of the Eleans in any other way; and, secondly, the fact that Herodotus expressly says that the Paleans fought at Platæa,³ while he gives reasons for the omission of the Eleans⁴ from the monuments. The falsification was thus effected after his time. I can not entertain the suggestion that Herodotus mistook FAAEIOI for $\Pi AAEIOI.⁵$

5. There is difficulty in arranging the three names, Paleans, Potidæans, and Anactorians, so that the copyist might read them before the Chalcidians, without abandoning the natural order. The position I have given them, while not satisfactory, seems to me not altogether improbable.⁶

¹Hdt. IX. 28, 16.

²Bröndstedt; Grote History of Greece (Murray, 1888) IV. p. 256²; Schubart, Jahrb. f. kl. Pn., 8 (1861). p. 480.

³IX. 28. 23.

⁴IX. 77. 10.

⁵Beloch, Jahrb. f. kl. Ph. 137 (1888). p. 324.

See below, p. 15.

STUDIES IN HERODOTUS.

ARGUMENTS FOR THE RESTORATION.

1. The grouping is geographically satisfactory, and the names might naturally be copied in Pausanias' order by reading straight across, first those in larger letters, then those in smaller. We thus get an explanation of the position of the Platæans between the Tirynthians and Mycenians, of the Ambraciots between the Melians and Tenians, and of the very peculiar combination $T_{\eta\nu\omega}$ $\tau\epsilon$ kal $\Lambda\epsilon\pi\rho\epsilon\hat{a}\tau\alpha\iota$, a combination that is utterly incomprehensible from any point of view except that of some accidentally close conjunction on the inscription.

2. The division into three geographical groups, the Peloponnesians, the Islanders, and those of the outer mainland is the same as that of Herodotus¹ in his enumeration of the states that furnished contingents of ships at Salamis. And not only this general agreement in order exists, but a closer comparison reveals a striking similarity in the order within the groups. With the Peloponnesian group in the reproduction, compare the following from Herodotus:2 isotpatevorto de oide in merodotus Λακεδαιμόνιοι έκκαίδεκα νέας παρεχόμενοι, Κορίνθιοι δε το αυτό πλήρωμα παρεχόμενοι και έπ' Αρτεμισίω. Σικυώνιοι δε πεντεκαίδεκα παρείχοντο νέας, Ἐπιδαύριοι δὲ δέκα, Τροιζήνιοι δὲ πέντε, Ἐρμιονεῖς δὲ τρεῖς. The agreement in order is exact. The same is true of the mainland group in the inscription, and this passage from Herodotus: ούτοι μέν νυν Πελοποννησίων έστρατεύοντο, οι δε έκ της έξω ήπείρου, 'Αθηναΐοι μέν πρός πάντας τους άλλους παρεχόμενοι νέας όγδώκοντα και έκατόν—. Μεγαρεῖς δε τωὐτὸ πλήρωμα παρείχοντο καὶ ἐπ' Ἀρτεμισίω, Ἀμβρακιώται δε έπτα νέας έχοντες επεβοήθησαν, Λευκάδιοι δε τρείς. In the case of the islands we have on the inscription the geographically satisfactory arrangement Aegina, Cyclades, Eubœa. Here Herodotus enumerates the separate states according to the size of their contingents, so that the Chalcidians and Eretrians naturally stand above the smaller islands. Two islands occur in Herodotus' list which are not on this inscription, the Siphnians and Seriphians. Of the former I have already spoken. The

¹VIII. 43-48.

²VIII. 43.

THE INSCRIPTION ON THE SERPENT-COLUMN AT DELPHI. 13

Seriphians do not occur on either inscription. Herodotus says they furnished only one penteconter, but the same is true of the Siphnians. It is evident that Herodotus obtained his information about the Seriphians from some other source than these inscriptions, as he did also in the case of the Crotoniats and Lemnians. But in the case of the Seriphians he obtained his information at a time later than the writing up of this part of his history, for in chapter 66 he speaks of all the Islanders being with the Persians "except the five states, of which I mentioned the names before." Now in chapter 46 six islands are mentioned, Ceos, Naxos, Cythnos, Seriphos, Siphnos, and Melos. Stein remarks in a note that Herodotus has forgotten the Ceans, but without assigning any reason for its being these rather than any of the others. One might rather say that he had forgotten the Naxians, for they had given earth and water to Persia,¹ and, besides, Ceos, Cythnos, Seriphos, Siphnos, and Melos form a geographical group as the westernmost of the Cyclades, so that the five would naturally be thought of together. But, since the Seriphians are not on either monument, it seems to be more probable that Herodotus got his information about them at a later date, and that he inserted them in chapter 46, but overlooked his statement in chapter 66. Mention of the Tenians is not made in chapter 46, but reserved until the time of their desertion just before the battle.² A Lemnian trireme also deserted,³ but they did not, like the Tenians, thereby win a place on the monument. This is because the one Tenian trireme no doubt represented their whole force, and none remained on the Persian side, whereas Lemnos must have furnished a larger contingent, and the desertion of one trireme would therefore not entitle them to a place. In this connection it may be remarked that Croton was not inscribed because the one trireme, credited to them by Herodotus, was not furnished by the state, but by a private individual.⁴

¹Hdt. VIII. 46. 10.

²VIII. 82.

³VIII. 11, 82.

^{&#}x27;Hdt. VIII. 47; Pausan. X. 9. 2.

3. A comparison of the restoration with the line of battle at Platea, as given by Herodotus,¹ also furnishes strong proof of its correctness. Beloch² has already expressed the opinion that Herodotus took his line of battle from the inscription at Delphi. His view has not been universally accepted, for while the names are the same, it is somewhat difficult to prove that Herodotus derived his order from it. But a comparison with the reproduction of the Olympian inscription proves the entire correctness of Beloch's general point of view concerning the source of Herodotus' detailed statements about the Greek states. at Artemisium, Salamis, and Platæa. The likeness is most striking on the left side of the line. Herodotus' order from the Peloponnesians on to the left of the line is: Eretrians, Styrians, Chalcidians, Ambraciots, Leucadians, Anactorians, Paleans, Aeginetans, Megarians, Platæans, Athenians. This order was clearly found by reading the inscription from left to right; the Eubœan group is followed by the northwest group, and the names of each group are given as they stand on the inscription; then he passes on up to the Athenians. In placing the Platæans next to the Athenians, Herodotus is either following tradition, or making an inference from the certainly existing tradition³ about the Spartans and Tegeans, and the known close connection of the Platæans and Athenians. The Athenians are thus given a division of close adherents to balance the Spartans and Tegeans. The same reason will account for placing the Potidæans beside their mother city, Corinth. On the right side of the line the Phliasians and Hermionians stand together both in the inscription and in Herodotus. But most striking of all is the combination of the Tirynthians, Mycenians and Lepreatæ in both. How else could Herodotus have conceived the idea of combining the Lepreatæ with the other two? How clear the arrangement is from this point of view, and how incomprehensible the combination of the Ambraciots and Lepreatæ on the Delphian

¹IX. 28.

²Jahrb. f. kl. Ph. 137 (1888). p. 326.

³Hdt. IX. 26 ff.

inscription, of the Tenians and Lepreatæ in Pausanias' list! Finally, in comparing the inscription with the line of battle at Platæa, there should be noted Herodotus' words $\tau \epsilon \lambda \epsilon \upsilon \tau a \tilde{\iota} \omega$ $\pi \rho \tilde{\omega} \tau \upsilon i' A \theta \eta \nu a \tilde{\iota} \upsilon i' \epsilon \tau a \sigma \sigma \sigma \nu \tau \sigma$, $\kappa \epsilon \rho a s \tilde{\epsilon} \chi \circ \nu \tau \epsilon s \tau \delta \epsilon \tilde{\upsilon} \tilde{\omega} \upsilon \nu \mu \circ \nu$.

Some further remarks may be made upon the order of the states within the groups. The importance of the state is the chief factor in determining its position, but some regard has also been paid to geographical situation. In the Peloponnesian group the Lacedæmonians, Corinthians, Sicyonians, Epidaurians, and Tegeans are clearly the most important, and are in their proper relative positions.¹ As to the rest it is not easy to form a definite opinion of their relative strength. As I believe, with Beloch, that Herodotus' report of their representation at Salamis and Platæa is based very largely on the order in the inscription, I can not use his figures as an argument. But it may be pointed out that the Orchomenians and Phliasians follow the Tegeans in a natural geographical order, and that to put Træzen above them, as might be done on the basis of Herodotus' figures, would separate the geographically connected Træzeniaus and Hermionians.

In the island group the order Aegina, Cyclades, Eubœa is a natural one geographically. It is unnecessary to analyze the positions further; yet I might venture the suggestion that the order, Ceans, Tenians, Naxians, Melians, Cythnians, makes a circle of the Cyclades.

In the third group it might be objected that Pale is not on the mainland. To this it may be replied that Herodotus² uses the term $\nu\eta\sigma\iota\omega\tau\alpha\iota$ in a restricted sense, in contrast, e. g., with Chios and Samos. Further, in placing the Paleans so as to agree with Pausanias' order, it is necessary to put them in the space between the Island group and their geographical neighbors, the Anactorians. As to the Leucadians, we may perhaps find support here for a modern theory with regard to them; Herodotus,³ at any rate, classes them with oi $\epsilon\kappa \tau\eta s$ $\xi\omega \eta\pi\epsilon\rho\sigma\nu$

¹On the Epidaurians and Tegeans see p. 29.

²VIII. 46. 1; VII. 95. 1.

³VIII. 44–5.

The Potidæans, too, may have been placed near the Eubœans, instead of directly under the Anactorians, with some reference to their geographical neighbors.

THE RELATION BETWEEN THE DELPHIAN AND OLYMPIAN INSCRIPTIONS.

If the above explanation of the Olympian inscription is the true one, can we get from it any light upon the order of the states at Delphi? From the Tirynthians on we have in the two lists a number of peculiar variations, and even more peculiar similarities. In both there is the insertion of the Plateans between the Tirynthians and Mycenians; in both the connection of the Ambraciots and the Lepreatæ, though in Pausanias the Tenians come between these two. On the Delphian we find together the Styrians, Eleans, Potideans, Leucadians, and Anactorians; in Pausanias the Styrians, Eleans, Potidæans, and These combinations are in themselves so peculiar, Anactorians. that but one conclusion can be drawn from the fact that they are found in both lists. If the restoration of the Olympian inscription is correct, the Delphian must have been copied from it. This idea had occurred to Schubart¹ as long ago as 1861, though he confessed his inability to explain how the results before us could thereby be explained. It is not quite the method one would naturally choose, to attempt to explain the difficulties in an original inscription by assuming it to be a copy from one of which we have but a mere imperfect copy. One's first inclination is to proceed from the original, and force the copy into line with it. Still the facts above stated speak for themselves, and we have one important historical statement that makes the assumption not improbable. There can be no objection to the belief that the names were inscribed upon the Olympian monument at the time of its erection. In the case of the Delphian we have the authoritative statement² that Pausanias

¹Jahrb. f. kl. Phil. 7 (1861). p. 480.

²Thuc. I. 132.

had inscribed upon it an arrogant distich containing his own name, and that the Lacedæmonians caused this to be removed, and inscribed in its stead the names of the states that joined in overthrowing the Barbarians. It is by no means an improbable assumption that the Lacedæmonians, in carrying out this substitution, took a copy of the inscription at Olympia. But can the order at Delphi be explained as a copy of the restoration I have made? Some difficulties are still left, but they do not compare with the difficulties in the inscription as it stands. In the first place they moved the Tegeans from seventh to fourth Here at least there is no difficulty. The story that place. Herodotus' gives us of the contest between the Athenians and Tegeans for the honor of leading the left wing is exactly the kind of tradition which we should expect to grow up, if at the time of this second inscribing there had been aroused some jealousy of the Tegeans, and some opposition on the part of the Sicyonians, Aeginetans, and Epidaurians, to being thus pushed down in the list. The Lacedæmonians also inserted the Thespians after the Plateans on account of their heroic conduct at Thermopylæ. In the rest of the list the engraver seems to have been allowed to follow the copy of the Olympian inscription as he willed. As far as the Melians he read the names in the same order as Pausanias. Then, struck by the geographical mixture that would result from taking the Ambraciots next, he followed straight down the column with the Naxians, Eretrians, and Chalcidians. The Styrians naturally came next, from whom he was led across more easily, on account of the crowding at this point, to the Pales and Potidæans. The Leucadians were observed as closely connected with the Anactorians, and it then remained to go back and pick up the missing names. All of this may not seem probable, but at least the fact remains that a copy of such an inscription as is given in the restoration accounts for the insertion of the Platæans between the Tirynthians and Mycenians, for the juxtaposition of the Ambraciots and Lepreatæ, and for the combination Styrians, Eleans, and Potidæans.

¹IX. 26–7.

And these are the chief difficulties in the order of the names on the Delphian inscription.¹

¹Frick's longer article (Jahrb. f. kl. Phil. Suppl. III) did not come into my hands until the first proofs of this paper had been read. His labored explanation of the position of various states, *e. g.*, of the Sicyonians, Aeginetans, and Megarians, would be found, perhaps, the most convincing proof that the Delphian inscription was a copy from the Olympian.

HERODOTUS, AND THE GREEK FORCES AT SALAMIS AND PLATAEA.

In his account of the battles of Salamis and Platæa Herodotus has given us very definite statements concerning the size of the contingents supplied by the various Greek states. His figures have been for the most part accepted, and introduced into our histories as at least the best attainable information, and not improbable except in a few particulars. Still there have not been wanting scholars to cast doubt upon the value of Herodotus' The criticisms that have attracted most attention, account. have been made by Beloch¹ and H. Delbrück.² The latter, who deals particularly with Platea, accepts as substantially correct Herodotus' figure of 38,700 hoplites, but rejects the larger part of the light-armed men, basing his conclusions upon the usual composition of the Greek army at that day. Beloch, arguing from the probable population of the Greek cities and their fighting strength as exhibited in later wars, cuts down the contingents of Sparta, Corinth, Megara, Sicyon, and Platzea, leaving the total number of hoplites at 27,600. The whole force under the command of Pausanias is fixed by Beloch at about 60,000, by Delbrück at 35-40,000. Beloch has also pointed out a few improbabilities in the roundness of Herodotus' numbers, and expressed the belief that some of the totals were the primary figures from which the separate figures were derived, rather than

¹Beloch, Die Bevölkerung der griechisch-römischen Welt (1886), and Das griechische Heer bei Platäa in Jahrb. f. kl. Phil. 137. p. 324 ff.

²Delbrück. Die Perserkriege und die Burgunderkriege (1887).

the reverse. In this paper I hope to establish the correctness of his view by a more careful analysis of the figures than has yet been made.

I. ARTEMISIUM AND SALAMIS.

At Artemisium there were assembled, according to Herodotus,¹ 271 triremes and 9 penteconters. The Athenian contingent numbered 127, but before the final engagement there arrived a reinforcement of 53 Athenian ships,² bringing their complement up to 180, the same as at Salamis. The desertion of a Lemnian trireme from the Persians during the stay at Artemisium is also recorded.³ After the retreat from this outpost, and reassembling at Salamis, Herodotus again enumerates the separate contingents⁴ and gives a sum total of 378 triremes,⁵ and seven penteconters. Later⁶ he tells us that just before the battle a Tenian ship deserted to the Greeks, and remarks that with the Lemnian deserter this brought the total number of triremes up to 380.

It should be noted that the separate items given in the case of Salamis amount to 366, and not to 378. Such errors in calculation are common in Herodotus. That, in this case, the mistake lies in one or more of the separate items is proved by the



later passage stating that the two deserters brought the number up to 380. The commonly accepted explanation is that the missing twelve belong to the Acginetans, for we are told that "they furnished 30 ships, but that they had others also manned, with which they were guarding their own land, while with the 30 that sailed best they fought at Salamis." Support for this explanation is found in Pausanias,² who says that "in the Median war the Aeginetans furnished the greatest number of ships after the Athenians." Now the Corinthian contingent numbered 40, so 12 added to the 30 of the Aeginetans would place them just ahead of the Corinthians. Still it is possible that the Herodotean text in this passage was the same in the time of Pausanias as it is now, and that the placing of the Aeginetans in second place does not depend upon other authority, but is an inference from Herodotus, whether by Pausanias himself or by another. It is worth noting that the Aeginetan contingent at Artemisium is 18, just 12 less than at Salamis, as the 30 at Salamis is just 12 less than their assumed number. Further the difference between 18 and 42 is far greater than in the case of any other state. Yet why should Aegina be so poorly represented at Artemisium? She could better afford to send her whole force thither than when her land was exposed to the attacks of the Persians at Phalerum.

In his analysis of the Salaminian figures Beloch³ points out that if the 180 Athenian ships be subtracted from the total 380, 200 are left for the other allies, a round number which he considers suspiciously like a primary assumption, from which the separate contingents were deduced. But in the 127 Athenian ships at Artemisium he finds a figure that does not look like invention, and he believes that Herodotus is here citing from a trustworthy source. The reinforcement of 53 ships, which Athens sends, was arrived at by Herodotus, so Beloch thinks, by subtracting the 127 from his assumed Athenian total of 180.

¹VIII. 46.

²II. 29. 5.

³Bevölkerung, p. 510 f.

Since the Greeks suffered severely at Artemisium,¹ the Athenians must have had fewer than 127 ships at Salamis, and consequently it is highly probable that Ctesias² is right in giving them 110. Aeschylus³ fixes the Greek total at 310. If the Athenians had 110, there would remain 200 for the others, the same number as Herodotus gives them. Aeschylus and Herodotus, then, according to Beloch, agree in assigning 200 ships to the non-Athenians, and the number, though plainly inexact, is in itself not at all improbable. The fault with this reasoning is that Ctesias, or some one before him, might have arrived at the number 110 for the Athenians, by subtracting Herodotus' 200 non-Athenians from Aeschylus' total 310. The fact that Ctesias himself puts the Greek total at 700, does not render this improbable; he may have been seeking a method of cutting down what he considered the extravagant statement of the philo-Athenian Herodotus. Further, I shall presently show that the 127, which Beloch considers so authentic, may have been deduced by Herodotus himself, so that Ctesias' 110 can find no support from this source.

Turning to my own analysis of Herodotus' figures, the following points seem to me to deserve attention:

1. Of the 380 ships at Salamis, 180 were Athenian. Among the remaining 200 were those classed as Chalcidian, which were furnished by the Athenians,⁴ but manned by the Chalcidians (Athenian colonists⁵). These ships are sometimes classed with the Athenians, sometimes with the others, both by modern historians, and by Herodotus⁶ himself. They number 20, and if we put them aside, as not belonging to the one group more than to the other, we find that the remaining 360 is evenly divided into 180 Athenian and 180 non-Athenian.

¹Hdt. VIII. 16, 18. ²§26. ³Persae 339. ⁴Hdt. VIII. 1. ⁵Hdt. V. 77. ⁶VIII. 46, 61. Cf. Diod. Sic. XI. 12. 4.

2. Of the 180 non-Athenian ships one came from Croton,¹ and one from Lemnos.² These places are outside of what Herodotus describes³ as "all those dwelling within the Thesproti and the Acheron river." The Greeks within these limits he subdivides into the Peloponnesians,⁴ "those from the outer mainland,"⁵ and the Islanders.⁶ Of the 178 ships furnished from this quarter, 89 came from the Peloponnesus,⁷ and 89 from the islands and outer mainland.⁸ Can this even division be accidental?

3. The fleet at Artemisium is made up of 271 triremes,⁹ and 9 penteconters,¹⁰ *i. e.* of 280¹¹ ships *including* penteconters. The fleet at Salamis consists of 380 ships, *excluding* penteconters.¹² Is there not something suspicious in this round 100 of difference?

4. At Artemisium there were 271 triremes, at Salamis 380, a difference of 109. Among the ships that make up this difference are one from Lemnos, and one from Croton, which are without the limits of Greece proper. The remaining 107 consist of 53 Athenian, and 54 non-Athenian.

To put this point in another way: If from the 280 ships at Artemisium we again subtract the 20 Chalcidian, as being properly neither Athenian or non-Athenian, we find that the remaining 260 is composed of 7 Locrian penteconters, 127 Athenian ships, and 126 non-Athenian. The Locrians, indeed, belong within the limits of Greece proper, but they are not found upon

⁷Lacedaemonians 16, Corinthians 40, Sicyonians 15, Epidaurians 10, Træzenians 5, Hermionians 3.

⁸Megarians 20, Ambraciots 7, Leucadians 3, Aeginetans 42 (?), Ceans 2, Tenians 1, Naxians 4, Cythnians 1, Eretrians 7, Styrians 2.

⁹VIII. 2. ¹⁰VIII. 1. 11.

¹¹Cf. Diod. Sic. XI. 12. 4.

¹²VIII. 48.

¹Hdt. VIII. 47.

²Hdt. VIII. 82.

³VIII. 47.

⁴VIII. 43.

⁵ VIII. 44.

⁶VIII. 46.

the Olympian monument, which Herodotus seems to have made the basis of his calculations.

From this point of view the 127 Athenian ships can not be held to be as exact and trustworthy a number as upon its face it seems to be.

5. Beloch¹ emphasizes the improbability of the Athenians having had as many ships at Salamis as at Artemisium. Let us consider this point more at length. The Athenian contingent of 127 ships at Artemisium received a reinforcement of 53 before the fighting on the third day.² In the third day's battle "the Greeks suffered severely, and not least the Athenians, onehalf of whose ships had been disabled." Within the next two weeks Xerxes was in possession of Athens, the Athenians having removed their households to Salamis, Aegina and Træzen.³ During this time they certainly could have done little refitting. In the course of their two weeks' stay at Salamis they no doubt made repairs, but surely, if half of their ships had been disabled, many of them must have been beyond repair. Still there is a possibility that they had other ships besides the 200 at Artemisium manned by themselves and the Chalcidians, though Beloch⁴ asserts that "Herodot sagt es-ausdrücklich, dass alle überhaupt verfügbaren attischen Schiffe beim Artemisium gekämpft haben." He does not cite the passage in Herodotus to which he has reference, but possibly it is that in VII. 144, where it is stated that the Athenians "resolved then, when they took counsel after the oracle was given, to receive the Barbarian invading Hellas with their ships in full force." But we read a little earlier in the same chapter that "Themistocles persuaded the Athenians to make for themselves with this money two hundred ships for the war, meaning by that the war with the Aeginetans. And the ships, not having been used for the purpose for which they had been made, thus proved of service at need to

¹Bevölkerung, p. 511.

²Hdt. VIII. 14, 15.

³Hdt. VIII. 40-41.

⁴Bevölkerung, p. 511.

Hellas. These ships then, I say, the Athenians had already, having built them beforehand, and *it was necessary in addition* to these to construct others." These last words may imply that they had more than the 200 ships on hand. But, however that may be, it is still strange that just 180 should be present both at Artemisium and Salamis, after all the damage they had suffered. Further, it is not the Athenians alone that furnished exactly the same contingent at both places. So also did the Corinthians, Megarians, Chalcidians, Eretrians, Træzenians, Styrians, and Ceans. This, though Herodotus tells us that in the third battle at Artemisium "many ships of the Greeks were destroyed."¹ The case of the Træzenians is really amusing. At Artemisium they furnished five ships. The loss of one of these² is expressly stated in VII. 180, and yet, like Homeric heroes, the five appear again at Salamis.

6. A final and minor point may be made against some of the figures assigned to the separate contingents. Of the 89 provided by the Peloponnesians the Corinthians contributed 40, the Sicyonians 15, the Epidaurians 10, and the Træzenians 5. Does this not suggest arrangement? A like thought is suggested by the Artemisian figures: Corinthians 40, Megarians 20, Aeginetans 18, Sicyonians 12, Lacedæmonians 10, Epidaurians 8.³

¹VIII. 16.

²Also of one Athenian, and one Aeginetan.

³Beloch, Bevölkerung, p. 511, remarks "hier ist zu erwägen, dass Herodot durchweg runde Zahlen giebt: 1-5, 7, 8, 10, 12, 15, 16, 18, &c." Are all of these "runde Zahlen"?

II. PLATAEA.

The army at Platæa consisted of the following divisions:¹

Peloponnesian Hoplites.	Outer Mainland and Islands.
Lacedæmonians10,000	Athenians 8,000
Tegeans 1,500	Platæans 600
Corinthians 5,000	Megarians 3,000
Orchomenians 600	Aeginetans 500
Sicyonians 3,000	Paleans 200
Epidaurians 800	Leucadians & Anactorians 800
Træzenians 1,000	Ambraciots 500
Lepreatæ 200	Chalcidians 400
Mycenæ–Tiryns 400	Eretrians & Styrians 600
Phliasians 1.000	
Hermionians 300	14,600
	Potidæans 300
23,800	Peloponnesians23,800
	Total 38,700

The order of names, as I have given them, follows the line of battle in Herodotus, with the Lacedæmonians holding the extreme position on the right, the Athenians on the left. The only variation I have made is in putting the Potidæans by themselves. According to Herodotus they stood next to the Corinthians at the latter's request. The division into Peloponnesians and non-Peloponnesians is my own, but, with the single exception referred to, it does not affect the line of battle which is purely geographical.

"Of the 10,000 Lacedæmonians," says Herodotus,² "5,000 were Spartans, and these were attended by 35,000 light-armed Helots, seven being assigned to each man." After giving the separate items as above he proceeds:³ "These, except the men in attendance upon the Spartans, seven per man, were hop-

¹Hdt. IX. 28-30.

²IX. 28. 3.

³IX. 29. 1.

lites, in all 38,700. This was the total number of hoplites assembled against the Barbarian, and the number of the lightarmed was as follows: Of the Spartan division 35,000, since there were seven to each man, and of these every one was equipped for fighting; and the light-armed of the rest of the Lacedæmonians and Greeks, since there was one to each man, numbered 34,500. The total number of light-armed fighting men was therefore 69,500, and the whole Greek force assembled at Platæa, adding together the hoplites and the light-armed fighting men, was 110,000, lacking one thousand and eight hundred men. And with the Thespians, who were present, the 110,000 was fully made up. For the survivors of the Thespians were present in the army, in number about one thousand eight hundred men; and these, too, did not have heavy arms."

In this passage the additions are made with remarkable accuracy for Herodotus. There is, however, one error. The light-armed men, that attended the hoplites exclusive of the Spartans, are said to be one per man, and to foot up 34,500. But, if we subtract the 5,000 Spartans from the 38,700 hoplites, we get but 33,700, a discrepancy of 800. The common explanation is that Herodotus meant that there was about one light-armed soldier to each hoplite. The Greek is as follows:¹ οί δε των λοιπων Λακεδαιμονίων και Έλλήνων ψιλοι ώς είς περι εκαστον εών ανδρα πεντηκόσιοι και τετρακισχίλιοι και τρισμύριοι ήσαν. It is clear that ώs belongs with the participle, and not the numeral. The words are exactly parallel to those in the line above. $\tau \hat{\eta} s \mu \hat{\epsilon} \nu \Sigma \pi a \rho \tau i \eta \tau i \kappa \hat{\eta} s$ τάξιος πεντακισχίλιοι και τρισμύριοι ανδρες, ώς ἐόντων ἑπτα περι ἕκαστον ανδρα. But the case is definitely settled by the following passage:² "So now the Lacedæmonians and Tegeans were left alone, being, with the light-armed, the former 50,000 in number, the Tegeans 3,000." The 50,000 Lacedamonians are composed of 5,000 Spartans, 35,000 Helots, 5,000 Lacedæmonian hoplites,³ and 5,000 light-armed men, exactly one per man. So the 3,000

¹IX. 29. 8.

²IX. 61. 6.

³IX. 28. 3-4.

Tegeans exactly double the 1,500 hoplites.¹ Thus we see that Herodotus had in mind, not only exactly one light-armed man to each hoplite on the whole, but the contingent from each state was one-half hoplites, one-half light-armed men.

A suggestion in explanation of the missing 800 has been made by H. Delbrück,² and accepted as plausible by Hauvette.³

Delbriick assumes that the 800 light-armed men, not accounted for by Herodotus, are the Athenian archers, who are particularly referred to on two occasions in the account of the battle.⁴ I have not Delbrück's work at hand, and do not know by what arguments he supports his suggestion, but I fail to see why these archers should not be included in the 8,000 Athenian light-armed men. Archers may have been at this time a new thing in Greece, but they were at all events $\psi i \lambda o i$. as, in fact, Delbrück's hypothesis admits, and, if Herodotus had regarded them as something so important as to be distinct from the other $\psi(\lambda)$, he would have made particular mention of their number, and credited the Athenians with it. Certainly he seldom fails to give the Athenians all their due, and I should prefer to assume that a sentence referring to the archers had been lost, rather than that Herodotus had neglected to count them in with the Athenian contingent.

The suggestion I am about to make will at first sight appear equally ill-grounded, but I hope that it may be justified by its results. A careful survey of the separate items will show that in general the size of the land force is in proportion to the number of ships furnished at Salamis, and, as in the case of Salamis, the numbers diminish as we go down in the list of names inscribed on the monuments at Delphi and Olympia. There are two exceptions to this statement, which are easily explicable. The Lacedæmonian land force is very large, their naval very small. Sparta was a land and not a sea power. On the other hand the 500 hoplites assigned to the Aeginetans is small in

¹IX. 28. 8.

²Op. cit. p. 165.

³A Hauvette, Hérodote, Historien des Guerres Médiques (Paris, 1894). ⁴Hdt. IX. 22, 60.

comparison with their 30 (42?) ships, but naturally so, for Aegina was counted second to Athens upon the sea. One other state, and only one, is noticeable for the lack of proportion between its land and sea forces. Epidaurus, which stands high in the list of states on both monuments, seventh on the Olympian, preceding even the Tegeans, who are fourth at Delphi, contributed but 800 hoplites, while the Tegeans number 1,500. It might, indeed, be claimed that their position above Tegea at Olympia is due to their being represented at Salamis by ten ships, whereas Tegea naturally was not represented at all. But why do the Sicyonians contribute 3,000 hoplites in comparison with 15 ships at Salamis, and the Træzenians 1,000 hoplites in comparison with 5 ships at Salamis, while Epidaurus has but 800 hoplites to its 10 ships? My suggestion is that the 800 Epidaurian hoplites be doubled to 1,600. The error might easily occur because, as each state's contingent consisted half of hoplites, half of light-armed men, Herodotus must in figuring out the hoplites divide each contingent into two, and here he carelessly made the division twice. His total, which should be 34,500, instead of 33,700, was corrected to agree with the separate items either by himself, or by a later hand, without due attention to the general result. A force of 1,600 hoplites for Epidaurus is fairly proportionate to her ten ships, and justly places her above Tegea, with its 1,500, on the monument at Olympia.

But, if such a change is to be made here, a corresponding change must be made elsewhere, for there is no mistake in Herodotus' statement that the items as he gives them foot up to 110,000 men. Here we note that the force of 1,800 men assigned to the Thespians is excessive.¹ Thespiæ had lost 700 men at Thermopylæ,² yet they appear at Platæa with 1,800 men, more by one-half than was furnished by the Platæans. Look at the Greek passage concerning the Thespians: $\epsilon\nu\delta\epsilon\kappaa$

¹Beloch (Jahr. f. kl. Phil. 1888, p. 326) says the figure is "nur ein lückenbüsser, um die 11 myriaden vollzumachen."

²Hdt. VII. 202 and 222.

μυριάδες ἦσαν, μιῆς χιλιάδος, πρὸς δὲ ὀκτακοσίων ἀνδρῶν καταδεοῦσαι. σὺν δὲ Θεσπιέων τοῖσι παρεοῦσι ἐξεπληροῦντο αἱ ἕνδεκα μυριάδες: παρῆσαν γὰρ καὶ Θεσπιέων ἐν τῷ στρατοπέδῳ οἱ περιεόντες, ἀριθμὸν ἐς ὀκτακοσίους καὶ χιλίους.

How easily that $\delta\kappa\tau\alpha\kappa\sigma\sigma\omega\nu$ might have been slipped in here by one who had noted that the figures as they stood were 1,800 short of the 110,000, and not merely 1,000. The 1,000 men thus left to Thespiæ are what we should expect as compared with the 1,200 of the Platæans, who stand above the others on the monument at Delphi.

If the above correction be accepted, the total number of hoplites, exclusive of the 5,000 Spartans, is 34,500, instead of 33,700, and the figure is thus in exact agreement with the total number of light-armed men, exclusive of the Helots. But this total of 34,500 is very suggestive of a more rounded figure, viz.: 35,000. Did not Herodotus start from the 35,000? Turning back to the Thespians, whom we left with 1,000 men, instead of 1,800, we note¹ that "they had no arms." Herodotus, indeed, leaves us in doubt whether they are to be classed as "light armed" or as non-combatants. From his phrase yilling uèv Sì των απάντων των μαχίμων ην το πληθος έξ τε μυριάδες και έννέα χιλιάδες και έκατοντάδες πέντε² we might infer that they were not included in the "fighting men." After their losses at Thermopyle and the abandonment of their city before the advancing horde of Persians, they were presumably unable to equip their citizens for battle.³ If Herbdotus could have assigned them to the fighting force, no doubt he would have divided them into 500 hoplites and 500 light-armed men, and our totals for hoplites and lightarmed, exclusive of Spartans and Helots, would have been 35,000 each. And the number of Helots is also 35,000! Can this similarity be accidental? And even if my conjecture

¹Hdt. IX. 30. 9: $\ddot{o}\pi\lambda\alpha$ $\delta\dot{\epsilon}$ $o\dot{v}\delta'$ $o\dot{v}\tau oi$ $\epsilon i\chi ov$.

²IX. 30. 1 ff.

³Why were the Thespians worse off than the Plataeans? Herodotus (VIII. 44) records that the latter attempted to save their households; why not also the Thespians? If their loss of 700 men at Thermopylae incapacitated them for further service, whence these 1,800 men at Plataea? Has the omission of their names on the Olympian monument any bearing on these questions?

about the Thespians and Epidaurians be set aside as unconvincing, the suspicion of manipulation is not removed from Herodotus; for, if we take the figures as they stand, and compare the 34,500 light-armed men with the 35,000 Helots, we can not but wonder at their similarity.

Further, there is a case of equal division of forces at Platæa parallel to those at Salamis. I indicated above that the Peloponnesian hoplites numbered 23,800. If the 800 extra Epidaurians be added to this we get 24,600. Now, as at Salamis, we subtracted the Athenians from the total and found the other half equally divided between the Peloponnesians and non-Peloponnesians, let us in this case subtract the Lacedæmonians, and compare the same groups. We find the remaining Peloponnesians to number 14,600, while the non-Peloponnesians The two bodies are not in this case exare 14.900. There is a difference of 300 between them. actly identical. Is it a mere accidental coincidence, or it is due to Herodotus' manipulation that the Potidæans, who number 300, are in the line of battle at Platæa, grouped with the Corinthians on the Peloponnesian side of the line, this being the sole exception to a purely geographical line of battle with Peloponnesians on the right side, non-Peloponnesians on the left? If this is not a matter of accident, the case recalls that of the Chalcidians at Salamis, who, as Athenian colonists, were grouped, now with the Athenians, now geographically. If the Potidæans, as recent Corinthian colonists, be counted neither with their geographical neighbors, nor with their kinsmen by blood, the same sum of 14,600 hoplites remains upon the Peloponnesian and non-Peloponnesian side of the account.¹

A minor point may be briefly referred to. I stated above that the figures at Platæa were in a general way proportional to those at Salamis. In a few cases the proportion is striking enough to deserve mention. The Sicyonians contributed 15 ships to the fleet with a complement of 3,000 men; their hop-

¹It may also be pointed out that the Potidaeans do not dwell "within the Thesproti and the Acheron river."

lites at Platea numbered 3,000. The Træzenians sent five ships with a complement of 1,000; their hoplites numbered 1,000. The Hermionians sent three ships with a complement of 600, and 600 is the sum of their hoplites and light-armed soldiers at Platea.

In the chapter following¹ his enumeration of the Greek forces Herodotus tells us which of the Greek states were opposed to the various nations on the Persian side. Thus the Persians fronted the Lacedæmonians and Tegeans, the Medes were opposed to the Corinthians, Potidæans, Orchomenians, and Sicyonians, and so on. Inasmuch as Herodotus did not know² how many Persians, Medes, Bactrians, etc., there were in Mardonius' army, and as only the Lacedæmonians, Tegeans, and Athenians came into actual conflict with the enemy, is not this line of battle on the Persian side something of an absurdity?

THE METHOD OF HERODOTUS.

While some of the points which I have made may be found artificial, enough will remain, I believe, to prove that Herodotus manipulated his figures. It is impossible to accept at their face value all these equal divisions and round numbers. How does such a conclusion affect our opinion of the trustworthiness of Herodotus as a historian? Even if we do not proclaim him the 'Father of Liars,' shall we at least throw aside as worthless his statements concerning the Greek and Persian armaments? The answer is not to be given lightly in the affirmative. Let us consider the problem that confronted Herodotus. He must have been intensely interested in determining as accurately as possible the size of the Greek armaments that met the traditionally enormous Persian host, and hardly less so in fixing the comparative services of the more important states at least. How was the problem to be solved? Of contemporary

¹IX. 31.

²VII. 60; VIII. 113.

documentary and inscriptional evidence there could be but little dealing with actual figures. He must have been forced to depend largely on oral tradition, and in such a case what was oral tradition worth? The events had occurred in his infancy, perhaps forty years before he had opportunity for investigation near the scenes of action. National Greek pride would tend to diminish their own force in comparison with the Persians, while the local feeling of each state would magnify its services in comparison with its rivals. Consider how the Athenian orater in Thucydides.¹ boasting to the Spartans of Athens' deed- in the service of Greece, claims that his city furnished little less than two parts of about 400 ships: how, again, Isocrates in the Panegvric, in a passage that contrasts the prowess of Greeks and Persians." claims that the Athenians met the whole Per-ian fleet at Artemisium with sixty triremes: while, a little later in the same address.³ where the comparative services of Athens and Sparta are the theme, he says that at Salamis Athens contributed more triremes than all the other states combined.⁴ There can be no doubt that, if Herodotus had accepted the claims of the various states concerning their own forces, the sum total of these claims would have gone enormously beyond the traditional total accepted by Greece as a whole. and far beyond the probable figure. What then was Herodotus to do? What he did do was to fix first upon a probable total. In making his estimate for Salamis he seems to have accepted practically the Athenian claim, while, in the case of Platzea, he adopted the figures of Sparta, the most powerful military state on land, as Athens was on the sea. There is substantial proof that Athenian tradition placed their own force at Salamis at 200 ships. Take, for example, the story cited by Herodotus⁵-quite apart from any discussion of the numbers.-the story of Themistocles' reply to the Corinthian Adi-

¹L 74. ²§ 90. ²§ 97. ⁴Cf. Dem. XVIII. 238. ⁴VIII. 61.

mantus, who had taunted him with being a man without a "We," he said, "have both a city and a land, larger in city. fact than yours, so long as we have 200 ships fully equipped." Again, in connection with the oracle concerning Athens' "bulwark of wood," Herodotus, 1 after giving the interpretation of Themistocles, goes on to say: "Another suggestion of Themistocles before this one proved most opportune, when the Athenians, having large sums of money in the public treasury, which had come in from the mines at Laurium, were going to divide it by giving ten drachmas to each man. Then Themistocles persuaded the Athenians to abandon this division and make 200 ships for the war, meaning the war against the Aeginetans. For this war was the saving of Greece, by compelling the Athenians to become a naval power. And the ships were not used for the purpose for which they were made, but became in this way a help to Greece in time of need." Such were the stories from which Herodotus formed his idea of the size of the Athenian fleet at the time of the Persian invasion, and Athens' power in his own day confirmed his opinion. He accepted the figure 200, but not quite at its face value. He assigned 180 to the Athenians, the other 20 were manned by the Chalcidians. What evidence there was for this disposition of the 20, it is impossible to say, but there may be some connection between this figure and the fact that Athens had sent 4,000² cleruchs to Chalcis some thirty years before, 200 men being the complement of a ship. In this connection I may call attention to the position of the Chalcidians at the bottom of the list on the Olympian inscription. Considering how great influence the size of the contingent had had in determining the order, this position of a state that shared fourth place with the Megarians at Salamis (third place at Artemisium) is noteworthy. The fact that they did not provide their own ships may account for it. By lending the 20 ships to the Chalcidians, the Athenian total was cut down to 180. If Herodotus

[•] VII. 144.

²Hdt. V. 77; Boeckh, Staatshaus, I. p. 564.

arrived at this figure by calculation, the following reasons may have influenced him. There probably was an Athenian tradition that they provided as many ships as all the other states together. To double 200 would give a figure much beyond the 310 of Aeschylus, and probably also beyond the general Greek claim for the total. With the Athenian figure cut down to 180, the corresponding 180 of the others, and the 20 of the Chalcidians, a total of 380 was reached. Even this is much larger than the 310 of Aeschylus; but Herodotus had the task of getting a large number of individual claims within a total much too small for them; and, further, it is not strange that an Asiatic Greek, who takes some pride in narrating the exploits of the Ionians¹ even against their fellow Greeks, should be willing to place the total at a somewhat higher figure than the pride of Hellas proper was willing to admit. With the non-Athenian figure thus fixed at 180, Herodotus assigned half to the Peloponnesians, and half to the remaining states. In the further subdivision it is clear that the Olympian inscription was largely used in scaling down the individual claims and giving them their proper proportions. No doubt, also, the relative strength of the states in Herodotus' day had its influence. It is hardly necessary to suppose that he actually collected evidence for all the minor states. The inscriptions proved their participation, and they were accordingly assigned a contingent. However, we have a strong proof of the carefulness of his investigation in the fact that he assigned contingents to three states not mentioned on either monument, viz., Croton, Lemnos, and Seriphos.²

¹VIII. 85, 87, 90.

²On the Pales see p. 11. \dots I do not misinterpret him, Beloch (Jahrb. f. kl. Ph. 137. p. 324 f.) believes that Herodotus knew little beyond what he inferred from the Delphian inscription. He seems to imply that he proves this position, when he accounts for the absence of the Crotoniats, Seriphians, Locrians, and Paleans from the inscription. But, surely, he really thereby proves how diligent and careful the investigation of Herodotus was, when he was able to supplement so complete a list as the inscription gave him. That he placed so high a value on the inscriptional record is entirely to his credit, even though he used it, perhaps, in a somewhat unwarranted way.

As to the relation between the figures for Salamis and Artemisium I am inclined to believe that, since the figure 280 at Artemisium includes the penteconters, so also the 380 at Salamis were originally intended to include the penteconters. There is not much evidence in support of such a view but it might be noted that (1) Herodotus' own figures do not make up the total number of triremes claimed; (2) the even division at Artemisium, assigning 127 to the Athenians, 126 to the others, recognizes and counts in the penteconters (2 Ceans); a similar recognition of the seven Island penteconters would be probable in dividing the 180 non-Athenian ships at Salamis equally between the Peloponnesians and the other allies; (3) in figuring out the relations between the Salaminian and Artemisian numbers, there is a possibility for a slip in the fact that the seven Locrian penteconters were present at Artemisium alone; is there any connection between this seven and the seven penteconters by which the total number of ships at Salamis goes beyond the 380? On this theory the Aeginetan ships would number 35, instead of 42.

In the case of Platea tradition may have fixed the total at a round 100,000, of which the Spartans, not to be outdone by the Athenians, claimed one-half. Now Herodotus must have known that 5,000 hoplites for the Spartans was an outside limit,¹ and the only way of reaching the total of 50,000 was by having an extraordinary number of Helots per Spartan. With 5,000 hoplites assigned to the Lacedæmonian Periœci, and an equal number of light-armed men, it would take 35,000 Helots to make up the required sum. The relation of this figure to the totals of light-armed and hoplites, excluding the Spartans, has already been pointed out. In fixing upon the size of the separate contingents, there was the same balancing of tradition, contemporary strength, and position in the inscriptions, as in the case of Salamis.²

¹On the improbability of this figure see Stein, Jahrb. f. kl. Ph., 1862. p. 853 ff. Cf. Hdt. VII. 103. 20; 234. 10.

²I can not refrain from calling attention to the fact that, if we look at the Plataean figures in the light of the restored inscription, we find

I might call attention to a few points in the Persian figures. In the total of $5,283,220^{1}$ the odd 3,220 come from the 7 in the 1,207 ships, which Herodotus derived from Aeschylus.² There were 200 men in each ship with an addition of 30 Persian marines.³ This gives 1,610 men, which becomes 3,220 in the final doubling.⁴ Doubling, indeed, is the most prominent feature of the calculations. The 1,207 ships yield 241,400 men. These 1,207 were war ships; in addition to them there must have been many transports and penteconters. The easiest way to arrive at the number of these was to double the 240,000⁵ men on the war-ships, assign an average crew of 80⁶ to each ship, and thence deduct the $3,000^7$ penteconters, transports, etc. It is a small matter that the most of these 240,000 are noncombatants, yet get themselves doubled at the end on the ground that the number of non-combatants equaled all those hitherto calculated.⁸

that the 8000 Athenians balance the 5000 Corinthians and 3000 Sicyonians in the opposite column; the 500 Aeginetans and 3000 Megarians balance the 1600 Epidaurians, 1500 Tegeans, and 400 Tirynthians and Mycenians; the 600 Plataeans balance the 600 Orchomenians. And, if one chooses to carry it further, the 1500 Phliasians, Hermionians, and Lepreatae in the lower right-hand corner of the Peloponnesian column balance the 1500 North-west Greeks in the lower right-hand corner of the other group; leaving the 1000 Troezenians to be set over against the 1000 Euboeans. So, if my suggestion that the Aeginetans furnished 35 ships (see p. 36)/ were correct, the 40 Corinthian and 15 Sicyonian ships would balance the 35 Aeginetan and 20 Megarian.

¹VII. 186. 11.

²Persae 341.

³VII. 184. 7, 11.

⁴VII. 186. 7.

⁵Herodotus deserves credit for his self-control in not doubling the odd 1,400.

⁶VII. 184. 15.

⁷VII. 94. 10, 184. 16.

⁸Something might also be made of the cavalry figures (VII. 84-6, 184), if it were not for a couple of palpable errors, one in the text, and one due apparently to an oversight of Herodotus. The latter is his reckoning the Libyan and Arabian drivers of chariots and camels at 20,000 men (VII. 184. 24), omitting mention of the Indians, who were in part also charioteers (VII. 84. 5). Then in VII. 84-86 we have the enumeration of the races that furnished 'cavalry,' with the Caspians

In dealing with the Persian armament Herodotus loses his usual common-sense view of things. The Persian empire, in its enormous wealth and extent, was so far beyond the knowledge and comprehension of the Greek of that day that a million or two more or less, in men and money, was a matter of small account. But the figures he has given us for the Greek states, while in a few particulars they have been shown to be improbable, are on the whole perhaps as near the truth as a modern historian could come, working with the same materials. We may wish that he had given us the evidence from which he drew his conclusions, but we must not forget that, even at the present day, the general reader sees nothing of the weighing of evidence, which is buried in the learned periodical.

mentioned twice, leaving us in doubt whether eleven races were intended, or ten (why not read $\omega \leq \delta' \alpha \ddot{\upsilon} \tau \omega \leq K \alpha \delta \pi i \sigma i \varsigma$?). If ten races furnished the 100,000 cavalry, charioteers, and camel-drivers (VII. 184. 22 ff.), there is a clear suggestion of 10,000 each, a suggestion strengthened by the Libyans and Arabians making together 20,000. It might be objected that the Sagartians had only 8,000 (VII. 85. 4), but the Persians themselves, to whom the Sagartians were very closely related, furnished 12,000 (VII. 40-1), so that together they came to an even 20,000. Another thing that casts doubt on the text in chap. 86 is the insertion of the Libyans among the eastern Asiatics, in fact between the two Caspians. In 71 they are placed, according to their geographical position, after the Arabians and Ethiopians. In 86 the Arabians might naturally be mentioned last, since they alone furnished camels; but the Libyans should either immediately precede them, or else follow the Indians, because these two alone furnished chariots.

THE BATTLE OF SALAMIS.

The perennial interest in this subject is instanced by the fact that, in the brief course the present century has run, there have appeared three papers upon it by well-known scholars,¹ who have made a considerable advance toward the solution of the problem. It is not my intention to enter upon the discussion of the question as a whole. The main points at issue, viz., whether the battle was fought within the sound or at its entrance, and whether the Greeks were lined along the shore of Salamis or across the strait, seem to me to have been decided in favor of the former alternatives. The questions that remain for discussion are rather matters of the exact interpretation of particular passages in Aeschylus and Herodotus, and in the following discussion I shall assume a general knowledge of the main points, and confine myself to a few particulars.

Herodotus² states that on the day before the battle the Persians put out from Phalerum towards Salamis, and formed in line. Bauer is the first to give this statement the attention it deserves. Hitherto it has either been neglected, because Aeschylus does not mention the movement, or an utterly improbable position has been assumed for the line the Persians formed, as *e. g.*, south of Psyttaleia. Now, in the first place, it can not be too emphatically stated that the silence of Aeschylus here means nothing. Those who lay so much weight upon the authority of Aeschylus, as the only contemporary who describes

²VIII. 70. 1.

¹Ad. Bauer in Berichte d. öster. arch. Inst. 1901, p. 91; Benj. I. Wheeler in Proceeds. Amer. Phil. Assoc. 1902, p. 127; C. F. Adams in Proceeds. Mass. Hist. Soc. 1903, p. 383.

the battle, often forget that he is a poet, and a dramatic poet. It does not lie within his province to instruct the spectator upon all the preliminaries that lead up to the scene he has chosen to present; vet he may, for the greater vividness of his picture, insert in his description of a scene something not chronologically belonging to it. Aeschylus begins his description of this battle with the message of Themistocles to Xerxes, one of the most important and decisive moments in the struggle, and one of great interest to his Athenian audience. All that preceded this could be left out of account, though he might use it, and change the time of its occurrence if necessary. Turning from the silence of Aeschylus to the interpretation of Herodotus' words — ἐπεί δὲ παρήγγελλον ἀναπλεῖν, ἀνηγον τὰς νέας ἐπὶ την Σαλαμίνα και παρεκρίθησαν διαταχθέντες κατ' ήσυχίαν, τότε μέν νυν ούκ έξέχρησε σφι ή ήμερη ναυμαχίην ποιήσασθαι νυξ γαρ επεγένετο οι δε παρεσκευάζοντο ές την ὑστεραίην — there is certainly no definite statement of the position of the line. It would, perhaps, be overstating the matter to claim that mapa in maperpilyoav meant that they formed their line along something, as in $\pi\epsilon \zeta \delta s \pi a \rho a \kappa \epsilon \kappa \rho \iota \mu \mu \epsilon \nu \sigma s$ $\pi a \rho a$ $\tau \delta \nu$ alyia $\lambda \delta \nu$.¹ Still there can not be the slightest doubt that the line was formed along the Attic shore. Wheeler² has well emphasized the fact that an ancient fleet preferred to fight with its rear upon a friendly shore. It is equally true that it would never occur to them to spend the night at sea, when there was an opportunity to draw up their ships on land, or at least tie them to the shore. And not only should we place the line there from à priori reasons, but, when Herodotus³ goes on to describe the movements of the Persians after receiving the message of Themistocles, he says "they put out from shore'' — ανηγον μεν το απ' έσπέρης κέρας —, ανηγον δε κτε. Aeschylus,⁴ too,—though this is of less importance,—describes how each captain, on receiving the orders of Xerxes, went to his ship and set sail. Concluding, then, that the Persian fleet

¹Hdt. IX. 98.

²Loc. cit. p. 131.

³VIII. 76.

⁴Peisae 378.

was lined along the Attic shore, the next thing is to decide upon its position. Bauer has the Persian ships ranged round the harbor of the Peiræus and thence northwestward as far as the point directly opposite Psyttaleia. He is thus able to give a sensible interpretation of Herodotus' phrase, 'the western wing.' He holds that the Persians must have been still outside the sound "denn Herodot bemerkt (VIII. 78), die Griechen hätten in der Nacht von der Umschliessung noch nichts gewusst, sondern geglaubt, die persische Flotte stehe noch so wie am Vortage.-Diese erste Aufstellung, die bis Mitternacht beibehalten wurde, muss also so beschaffen gewesen sein, dass sie bei den Griechen in Salamis die Befürchtung umschlossen zu sein nicht aufkommen liess." It is at this point that I must take issue with Bauer, and most of the scholars, who have of late handled the subject. Let us look at the matter first from the point of view of the Persians. Herodotus says that after the calm and orderly formation of their line there was not time to fight, but they were getting ready for the following day. Now, if the Greeks were in the bay of Ambelaki, what reason was there, from the Persian point of view, for remaining outside the sound. If this division into squadrons and formation of their line was to mean anything as a preparation for the morrow, they would retire to the shore for the night with the formation preserved, and a line of the necessary length would naturally extend into the sound a considerable distance. If they hugged the shore, which was in the possession of their own troops, an attack by the Greeks upon the entering line would be impractical. I should be inclined to assume, then, that the western wing of the Persian line at nightfall reached far in towards C. Amphialé. Looking at the matter next from the Greek point of view, what would their action naturally be under the circumstances? As I have just said an attack upon the entering ships could only be made by coming within range of the Persian archers on shore. They might have thought of immediate flight to the west, but this would have exposed them to a rear attack and certain loss of a large number of ships.

Flight, if they thought of it at all, must be deferred until night. But objection is made to the Persian fleet entering the sound at all, before nightfall, because Herodotus' gives us to understand that the Greeks had no idea at midnight that they were surrounded, or in danger of it, while, if the Persians had taken up such a position as I have described, the Greeks would have felt themselves already shut in. Is this view correct? According to the usual position assigned to the Persians, the eastern entrance to the sound was much more effectually blocked than in the position I have assumed. Escape could be effected to the west alone. If the Persians were on shore as I have placed them, escape would still be possible in both directionsquite as possible, it should be noted, as the unobserved advance of the Persians to their blockading positions, unless the Greeks were so utterly careless in the matter of outposts as to have none at the ends of the points inclosing Ambelaki. But in all probability, the Greek generals had no idea of flight. They had waited here for some weeks with the intention of fighting in an advantageous position, and were not to be frightened by the mere advance which they had been long expecting. Themistocles' object in persuading the Persians to block up the entrances was to prevent any considerable number of desertions during the night, and incidentally he kept a large number of the enemy rowing about and watching the outlets, not a good preparation for a kind of battle in which so much depended upon the alertness and skill of the crew. As Herodotus² thinks it worth while to remark, οί μέν δή ταῦτα τῆς νυκτὸς οὐδέν ἀποκοιμηθέντες παραρτέοντο.

I find a further argument for the view that the Persian west wing was far within the sound at nightfall in Hercdotus' description³ of the movements after Themistocles' message. "The west wing," he says, "put out to Salamis inclosing them." I can hardly believe that, if he had in mind the entrance into the sound and movement along the Attic shore past C. Am-

¹VIII. 78. ²VIII. 77. 1. ³VIII. 76.

phialé and across to Salamis, he would have expressed it quite so briefly. Does all this lie in the single word κυκλούμενοι?

In the interpretation of the next clause- ἀνηγον δὲ οἱ ἀμφὶ τὴν Κέον τε και την Κυνόσουραν τεταγμένοι - Bauer takes the only possible meaning of the words, rightly objects to the assumption that Herodotus is thinking of the end of the movement, and boldly asserts that Herodotus knew the east wing was on the Attic shore, but used these words in describing it simply to work in the oracle about the bridge from Munychia to Cynosura. In all of this I am in complete agreement with Bauer, except in one point. I can not see why Herodotus could not have said "those stationed about Ceos put out to Cynosura," and thereby made the fulfillment of the oracle perfectly clear. The simple fact is that there is no way of interpreting Herodotus' words consistently with the assumption that Cynosura is the long point of Salamis. There is no other evidence that this name was applied to the point than that Herodotus mentions a Cynosura in his description of the battle, and this is the point that looks most like a Dog's Tail, on the map at least. That is, Herodotus is our only authority for the name, and to assign it to this point we must give an impossible interpretation to his words. But, it may be objected, there is the oracle. The oracle proves simply nothing. There are numerous points along the Attic shore, and the ships filling the strait from any of them to Munychia would form a bridge so as to prove a perfect fulfilment of the oracle to Herodotus' easily satisfied religious soul; or, to remove the weight from his shoulders, in order to account for the writing of the oracle, it is not necessary to assume that the bridge stretched from Munychia to the point of Salamis.

But let us look at Herodotus' reference to Munychia. Following the clauses that state the movements of the eastern and the western wings, we have the words $\kappa \alpha \tau \epsilon \hat{\alpha} \chi \delta \nu \tau \epsilon \mu \epsilon \chi \rho \iota$ Mov $\nu \nu \chi \ell \eta s$ $\pi \dot{\alpha} \nu \tau \alpha \tau \delta \nu \pi \sigma \rho \theta \mu \delta \nu \tau \eta \sigma \iota$. "As far as Munychia" is an intelligible phrase if the point of Salamis is Cynosura, and if the Persians moved across from it to Munychia; but the Persians were not yet at this point. There is one other possibility for the $\mu \epsilon \chi \rho i$ Movro $\chi i \eta s$. Most writers take this clause, beginning $\kappa a \tau \epsilon \tilde{i} \chi \delta v \tau \epsilon$, to refer entirely to the movement of the east wing. Wecklein¹ thinks it gives the result of the movements in both the preceding clauses. Grammatically I am inclined to agree with Wecklein. This clause, loosely tacked on by the particle $\tau \epsilon$, belongs rather to the whole preceding sentence, with its parallel $\mu \epsilon v$ —and $\delta \epsilon$ — clauses, than to the $\delta \epsilon$ —clause alone. Such an interpretation gives us the other possibility for the $\mu \epsilon \chi \rho i$ Movro $\chi i \eta s$. Herodotus has just described the extension of the west wing over to Salamis. Looking away now in the other direction he sees the line of ships extending eastward through the straits "as far as Munychia."

According to Aeschylus,² on the receipt of the message from Themistocles, Xerxes issued the following order:

> τάξαι νεών στῖφος μὲν ἐν στοίχοις τρισὶν ἔκπλους φυλάσσειν καὶ πόρους ἁλιρρόθους, ἄλλας δὲ κύκλῳ νησον Αἴαντος πέριξ.

The first two lines clearly refer to blocking up the straits. Bauer thinks that the third line refers to the result of the movement of the west wing into the sound, and that it describes the position of the Persians in the morning, as they face the harbor of Ambelaki. I find this interpretation infinitely preferable to the attempt to explain the line as referring to the squadron, which, according to Diodorus,³ was sent round the island; and preferable, also, to the meaningless literal interpretation which makes the Persians place ships at various points about the island to prevent escape. With Bauer I believe that the ships which are "placed in a circle about the island of Ajax" refer to those that face the harbor of Ambelaki; but instead of the words describing the movement explained by Bauer, I believe that Aeschylus is here describing the sight that met his eye when day dawned on the morning of the battle. The straits

¹Sitzungsber. d. k. bayr. Acad. d. Wiss. 1892. p. 22.

⁻Persae 366.

³Diod. Sic. XI. 17. 2.

to the east and west were filled with a mass of Persian ships, while round the opposite shore of Attica there stretched for three or four miles a single line of ships, which, viewed across the narrow strait, might well give the impression of encircling the island. If this interpretation is correct, Aeschylus here freely transfers to the commands of Xerxes what had already in part been done in the afternoon, and thus completes his picture of the Persian position before the battle began.

Before leaving these lines I may refer to Bauer's view that the majority of the Persian ships were not engaged in battle in the sound, but employed in blocking the straits. This idea is drawn in part from Aeschylus' use of the word $\sigma \tau \tilde{\iota} \phi \sigma s$, but $\sigma \tau \tilde{\iota} \phi \sigma s$ does not necessarily mean what we do by "the mass." It could be applied to a compact body as opposed to an extended line, even though the line actually contained the larger number of ships. Aeschylus says the ships blocking the straits were in three rows. Further, by assuming that the Phœnicians and Ionians alone engaged the Greeks, Bauer loses sight of what was the main cause of the Persian defeat, namely, the overcrowding in the sound and consequent impossibility of manœuvering.

The further description of Aeschylus,¹ beginning Kal $\pi \acute{a}\nu\nu\nu\chi\omega$ $\delta \grave{\eta} \delta i \acute{a}\pi \lambda oo\nu \kappa a \theta i \sigma \tau a \sigma a \nu$, I should refer with Goodwin² to the rowing about of the blockading squadrons. In his explanation of the occupation of Psyttaleia Goodwin has come round to the view that it was made in the expectation of the Greeks attempting to escape, and thus proves nothing for the position of the battle that actually took place.³ This seems to me also the preferable view.

The points made by Löschke⁴ and Goodwin based upon the interpretation of ll. 398 ff. in the Persæ are satisfactorily answered by Bauer and Wheeler. Goodwin also makes much of

¹382 ff.

²Papers Amer. School at Athens, I. p. 246.

³Proceeds. Mass. Hist. Soc. 1903. p. 405.

⁴Jahrb. f. kl. Ph. 1877. p. 25.

Aeschylus' use of the word perpa, as if it could only be interpreted of a column of ships entering the narrow strait; but the interpretation is too literal. In ll. 87 ff. of the same play Aeschylus says δόκιμος δ' ούτις ύποστας μεγάλω βεύματι φωτών έχυροις έρκεσιν ειργειν αμαχον κύμα θαλάσσας; here the advancing host of Persians is at once a perima and a rima. The words are nothing more than pictures of the great numbers. The fact is that the crowding and confusion of the Persian ships is much more intelligible if we think of a great encircling line converging upon a center, than if we take the view that a column of ships entored the straits; for their greatest crowding would be at the entrance itself and once inside they could spread out to meet the Greeks. As I understand it the Greek ships were arranged in a curve reaching from the Punta Pt. to the end of the so-called Cynosura, and the Persians came "streaming" in upon them from all sides. Note Aeschylus' description Έλληνικαί τε νηες ούκ αφρασμόνως κύκλω πέριξ $\mathcal{E}\theta \epsilon \mu v \sigma v^2$ The Greeks had learned the advantages of this position at Artemisium,³ and had cleverly chosen their present position, and tricked the Persians by a false message, so as to force them to put themselves at a disadvantage again. · According this to view the retreat⁴ of the Greeks at the beginning might well be a manœuvre⁵ designed to draw on the converging line of the Persians, and excite them to neglect, in the ardor of pursuit, the proper precautions against collision with one another. Then "the Greek ships struck skilfully in the circle round about."

In the description of Diodorus I can find nothing of importance that could not be drawn from Aeschylus and Herodotus. Even his circumnavigating squadron had nothing else for a foundation than l. 368 of the Persæ, and the corresponding

¹412. Cf. Wheeler, l. c., p. 138.

² Persae l. 417 f.

³Hdt. VIII. 10, 11, 16.

⁴Hdt. VIII. 84.

⁵Cf. Breitung, Jahr. f. kl. Ph. 1884. p. 859.

story about Eubœa.¹ I can not, with Beloch, take the latter story as the secondary one. In that case there was the necessity of aiding the Persian land force at Thermopylae. The command of the Euripus was an essential as long as Leonidas continued to block the advance. I do not, with Adams, see the similar necessity of the Persians commanding the Salaminian sound. From Athens to the Isthmus the shorter route was outside the island, and the voyage, I take it, no very dangerous one. With their numerical superiority the Persians should have been able to convoy grain-ships across to the army, while retaining a sufficient force at the outlets to hold the Greeks in check.

¹In Diodorus (XI. 18. 2) there occurs the statement that the Aeginetans and Megarians occupied the right wing. "For it was believed that they were the best sallors after the Athenians and that they would be particularly eager to distinguish themselves, because they alone of the Greeks had no refuge, if any calamity befell them in the battle." From this passage the conclusion is drawn (Duncker, Gesch. d. Alt. VII, p. 283; Busolt Rh. Mus. 1883. p. 628; Wecklein, l. c. p. 19) that Diodorus (Ephorus), who is supposed in his $\pi\alpha i \tau \delta \nu \pi \delta \rho \delta \nu \mu \epsilon \tau \alpha \epsilon v$ Σαλαμίνος και Ήρακλείου κατείχον to place the Greeks across the strait facing south, contradicts himself; for if the Aeginetans and Megarians were on the right wing, they were nearest the Salaminian shore. I can scarcely believe that no one has yet pointed out the error in this conclusion. Of course the reference in Diodorus to the Megarians and Aeginetans having no refuge in case of disaster, has nothing to do with their position in this battle. Diodorus meant that, if the battle were lost, Aegina and Megara were exposed to the enemy, whereas the Peloponnesians could still make a defence at the Isthmus (cf. Hdt. VIII. 74. 12).









