

from a predominant order to be taken too seriously, especially by those who recall that half a decade ago our popular usage was fluctuating between *birdman* and *manbird* (cf. *upstart* and *startup*). We might even with a rare and moribund type of compound, those with governing *priora*, suppose that the **tur-viçva-* type had been ousted by the reversed type of *viçvâ-tur-*. The *o*-grade of *Fop* looks to be derived from compounds in *-wor*, let us say *pro-wor*.¹

14. To escape the theory of composition for some of the words for ant we may derive *Forpūā-* and Lat. *formica* (for **uormica*) from the primate *worsmāĩ-*, 'urine'; cf. *οὐρεῖν*, 'urinate,' and Lith. *uersmĩ*, 'fons.' A somewhat similar primate **murma*, 'crumb,' will serve as the foundation for *μύρμα-κ-*, quasi 'crumber.'

D. Latin *forma*.

15. The fact that *forma* seems to be a sort of metathesis of *μορφή* is pure accident. For *forma*, 'shape,' we have an excellent source in the root of *ferire*, 'strike' (cf. *τύπος*: *τύπτει*), so that a *forma* was a sort of 'Schlag,' or even meant 'cut.' But *μορφή* comes from the root *mer*, 'press' (cf. Skr. *mar-d-ati*) and 'rub' (see § 11), the rub being the contour left after a pressing or rubbing process.

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ON THE MEANING OF ΒΑΔΗΝ AND ΔΡΟΜΩΙ IN GREEK HISTORIANS OF THE FIFTH CENTURY.

SINCE the English author, who has written in the greatest detail and with most acceptance on Greek warfare in the fifth century, has now declared definitely that *δρόμω* cannot mean 'at the run,'² but should be translated both in Thucydides and Herodotus 'at the quick step' in contrast to *βάδην* 'at the slow step,' it may be worth while to re-examine the evidence, and to give some reasons for maintaining the translation 'at the double' at least in the descriptions of battles given us by Thucydides, Xenophon, and Herodotus.

I begin with Thucydides, the author with whom Dr. Grundy is dealing. There are, I believe, two passages in his history (not quoted by Dr. Grundy) in which *δρόμω* almost certainly means 'at the double' or 'at a run.' In Book III. 111 the Ambraciots perceive the Peloponnesians, by whom they were being deserted, already some distance away and retiring rapidly. In trying to overtake them they broke into a run (*ἔθρον δρόμω*). Here it is obvious that a quick march would have been

¹ The ancient, because quite isolated, Sanskrit compound *prād-vivāha-s* (see Meillet, *MSL.* 18. 315) may as well be rendered by 'judging-cases' as by 'case-deciding'; and in Av. *vi-karoti-uštāna-*, 'destroying-life,' there is no

reason to doubt that the governing prius *-karoti* is typically like Skr. *kṛt-*, 'making.'

² Dr. G. B. Grundy, *Thucydides and the History of his Age*, p. 269.

quite inadequate for their purpose; the Ambraciots must have gone at their best pace. Again, in the description of the landing on Sphacteria (Thuc. IV. 31 sq.) ἐχῶρον δρόμῳ is best rendered 'at the double,' since speed and surprise were plainly essential factors in the Athenian assault on the Spartan outpost (cf. Thuc. IV. 32). Nor can I regard the passage on which Dr. Grundy relies, the description of the hurried march of Brasidas through Thessaly (Thuc. IV. 78 sq.), as decisive. No doubt in it Thucydides applies the terms δρόμῳ and διέδραμεν (ch. 79) to a march of several days. But there is not the smallest hint that he is using technical language with rigid accuracy. His purpose is to emphasize the extreme rapidity of a march in a case where speed was necessary to success. He might fairly expect that the words would be interpreted by the context and not treated as technical terms. In support of this I would quote a parallel from Herodotus. In his description of the disorderly advance of the Persian hosts at Plataea (IX. 59), the phrase ἐδάκον ὡς ἕκαστος ποδῶν εἶχον implies in the context full speed—i.e. as I shall argue below at the double—but no one would infer from the similar phrase in VI. 116 that the Athenian hoplites doubled all the way home from Marathon to Athens. In fine, even in Thucydides it would seem best to regard δρόμῳ as naturally meaning 'at the double,' and to treat his description of the march of Brasidas as an intelligible and pardonable exaggeration.

If we turn to the most military of Greek historians, Xenophon, the case is plainer. It is true that in his works we find βάδην used for slowly, at foot's pace, perhaps even for 'at a slow march.' The usage is as early as Herodotus (IX. 57, cf. *infra*), and is most frequent in later military historians such as Polybius and Arrian. Further, we find in Xenophon the contrast between βάδην and δρόμῳ (cf. *infra*), and even in a non-military passage a similar antithesis between βάδην and τρέχων (Cyr. II. 2. 30). But in the accounts of actual fighting δρόμῳ appears to mean at the double. Thus in the battle of Coronea (Hell. IV. 3. 17) it is used of the final charge of the contending armies, which even Dr. Grundy admits may have been made at the double. Again in the encounter between Agesilaus and Tissaphernes (Hell. III. 4. 23) it is used of peltasts, who are ordered to take the lead in a charge made at a run: ἐκέλευσε τὰ δέκα ἀφ' ἡβης θεῖν ὁμοσε αὐτοῖς, τοῖς δὲ πελτασταῖς εἶπε δρόμῳ ὑφηγείσθαι. Lastly, in the description of the Greek advance at Cunaxa (Anab. I. 8. 18 sq.) we hear first that a part of the Greek phalanx which had got a little behind quickened to a run (ἤρξατο δρόμῳ θεῖν) and then they all ran (πάντες ἔθειον); finally, when the barbarians are in full flight, the Greeks in hot pursuit shout to one another not to run but to keep their ranks (μὴ θεῖν δρόμῳ ἀλλ' ἐν τάξει ἔπεισθαι).

These descriptions of charges create a strong presumption that δρόμῳ means 'at a run' or 'at the double,' but the decisive passages are two, which show that βάδην properly qualified can be used for 'quick march,' and is still contrasted with δρόμῳ, which must therefore mean 'at the double.' In Anab. IV. 6. 25 we read: οἱ μὲν πελτασταὶ τῶν Ἑλλήνων δρόμῳ ἔθειον πρὸς τοὺς παρατεταγμένους, Χειρίσοφος δὲ βάδην ταχύ ἐφέπειτο σὺν τοῖς ὀπλίταις, which can only mean the peltasts charged at the double, while the hoplites followed at foot's pace, but rapidly—i.e. at a quick march. Similarly in Hell. V. 4. 51 sq., after hearing that the Thebans retreated before Agesilaus at a run (δρόμῳ ἔθειον . . . ἀποχωρεῖν δρόμῳ . . . παραθέοντας), we are told that the Sciritae when they in turn were forced to retire ᾠττον ἢ βάδην ἀπηλθον. It seems clear then that Xenophon means by βάδην at foot's pace, or at a slow march, and by δρόμῳ at a run or at the double; and that when he is obliged to mention a quick march he uses, not δρόμῳ, but βάδην with a qualifying word or words (βάδην ταχύ, ᾠττον ἢ βάδην), a fact which surely proves that there was not a technical word for 'quick march.'

Coming last to Herodotus, the least military of the three historians, and

therefore the least likely to use technical terms, there can be little question that in a non-military passage describing the rush of the seven conspirators at the Magi (III. 77) ἦσαν δρόμῳ ἐς τὸν ἀνδρεῶνα, δρόμῳ should be given its natural meaning 'at a run.' In the account of the retreat of Amompharetus before Plataea (IX. 57) βάδην need mean no more than 'at foot's pace,' though 'at a slow march' is a sense very suitable to the context. But in the description of Mardonius' pursuit (IX. 59) δρόμῳ must mean 'at the double,' since, after saying of Mardonius ἦγε τοὺς Πέρσας δρόμῳ, Herodotus adds that the other troops followed at their best pace (ἐδίωκον ὡς ποδῶν ἕκαστος εἶχον) with their ranks in utter disorder, plainly implying that the whole army was bent on making the utmost speed. Lastly, in the passage which is of the greatest historical interest, the story of Marathon, Herodotus (VI. 112) four times declares that the Athenians charged δρόμῳ, and adds that they were the first troops within his knowledge to do so. Now it is in itself unlikely that hoplites had hitherto always attacked at a slow march, and never seen the advantage in impetus to be gained from a quicker step, though fear of disordering their ranks might well have restrained them from charging at the double. And comparison with Mardonius' attack at Plataea makes it fairly certain that at Marathon too Herodotus means by δρόμῳ 'at a run' or 'at the double.' The difficulty of a body of hoplites charging a mile at the double, which first led Dr. Grundy (*Great Persian War*, p. 188) to suggest (as Leake and Bähr had already done) that δρόμῳ should be translated 'at the quick step' is better met by the other suggestion he mentions—viz. that Herodotus has ascribed to the whole length of the Athenian advance (a mile) a form of movement (the double) which was only really adopted when the Greeks came within range of missiles. It is worth observing that both Diodorus (XIV. 23. 1) and Polyænus represent Clearchus as advancing slowly at Cunaxa till within bowshot of the enemy, and then bidding his men charge at speed.¹ I do not maintain the truth of this, for it is inconsistent with the account of Xenophon; but if the story in these late writers goes back as seems likely to Ephorus, it shows that in the fourth century this was a recognized method of dealing with the Persian archers.

It is not then, I think, too much to say that to the Greeks the main antithesis is between βάδην, 'at foot's pace,' 'at a walk,' and δρόμῳ, 'at a run,' 'at the double,' and that in descriptions of battles this distinction is absolutely valid, so that when a careful writer like Xenophon wishes to mention a quick march he is driven to qualify the term βάδην. The use of βάδην and δρόμῳ as military terms corresponds closely to their natural meaning in ordinary life, βάδην being used for ordinary marching, and δρόμῳ in all accounts of battles for charging at the double.

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¹ Polyænus actually uses the terms βάδην and δρόμῳ (II. 2. 3).