## THE BATTLE OF PYDNA\*

(PLATE I)

#### I. THE GEOGRAPHICAL SETTING (MAP 2)

The battle took its name from Pydna because it was fought 'in the plain before Pydna'.¹ Accordingly the first need is to identify the site of Pydna as it was in the year of the battle, 168 BC. Originally a Greek city, planted by settlers from the south on the coast of Pieria and possessing a good harbour (Diod. xi 12.3, xix 50.4), Pydna was acquired by the Macedonian king Archelaus, who moved the people to a site two or three miles inland (Diod. xiii 49.2). In the ensuing period the original site was reinhabited. For Pydna appeared as an independent city in the 360s (IG iv² 95, II 6), 'a Greek city' (Ps.-Scylax 66) 'on the coast' (Ps.-Scymnus 618). When Philip II captured it, he had good reason to maintain it as a port. In 317–316 BC it was besieged by land and by sea. It was certainly on this coastal site in 168 BC.

It used to be thought<sup>2</sup> that Pydna was on the elevation 56 m due east of the old part of the village Makri Yialos (now having a regular population of 1,600). However, we found only a little pottery there and that probably of recent date;<sup>3</sup> and the fact that there is a toumba, covering a Macedonian built tomb, on the elevation shows that it is not the site of a settlement. On the other hand, on the coast to the south between the hotels 'Achilleion' and 'Ancient Pydna' there are the clear remains of an acropolis, its highest point being 36 m above sea level. As we walked over the site we collected one piece of Attic Black-Figure pottery, much excellent black glaze, and sherds of Hellenistic gray ware and relief ware. The present area of the acropolis is some 400 m from east to west and 150 m from north to south. Its natural defences are formed by cliffs on the seaward side and by steepish slopes on the three landward sides. These defences were reinforced by a circuit wall, of which the northern part is indicated today by a swell in the ground at right angles to the road just north of the top. The cliffs are falling into the sea, and at one point ten feet down in the yellowish-brown soil of the cliff I saw a line of ancient wall. Over the last two thousand years a substantial part of the site has fallen into the sea. The ancient harbour, presumably at the then mouth of the Karagats river, has silted up completely, and the villagers today pull their fishing-boats up on the open beach. Fishermen reported that there are building stones and amphorae visible in the shallow water below the cliffs.4

\* Abbreviations in this article are for the ancient sources L. for Livy, Plut. for Plutarch, *Aemilius Paulus* (Teubner ed.), Plb. for Polybius; and for modern writings as follows:

Heuzey: L. Heuzey, Le mont Olympe et l'Acarnanie (Paris 1860)

Kromayer: J. Kromayer, Antike Schlachtfelder ii (Berlin 1907) 267 ff. and iv (1924–31) 600 ff.

HMac.: N. G. L. Hammond, A History of Macedonia i (Oxford 1972)

Meloni: P. Meloni, Perseo (Rome 1953)

Pritchett: W.K. Pritchett, Studies in Ancient Greek Topography, 2: Battlefields, U. Calif. Class. Stud. iv (1969) 145 ff.

Walbank: F. W. Walbank, A Historical Commentary on Polybius iii (Oxford 1979) 378 ff.

For the famous frieze at Delphi see A. J. Reinach, 'La frise du monument de Paul-Émile à Delphes', BCH xxxiv (1910) 433 ff. and P. Lévêque in Mélanges Ch. Picard (Paris 1949) ii 633 ff.; for this I have referred to Meloni, who used both articles. The account in The Cambridge Ancient History viii (1930) 268 f. is too brief to

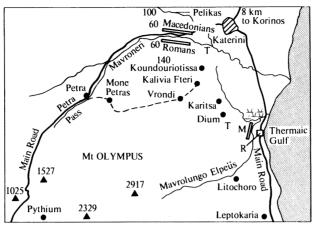
be of value in this context. I am most grateful to the British Academy, which gave me a grant for this and other pieces of research in Macedonia.

<sup>1</sup> Str. 330 fr. 22; Plut. 16.5; Zonaras ix 23. It was primarily these passages which led me in *HMac*. 129 f. to put the battle not by Katerini as Kromayer and Pritchett had done but in the plain farther north. I had not then visited the site of Pydna and the plain between Pydna and Korinos.

<sup>2</sup> For instance by C. F. Edson in *Hesp.* xviii (1949) 84 f., followed by F. Papazoglu, *Makedonski gradovi u rimsko doba* (Skopje 1957) 101, and by myself in *HMac.* 128 f., before I visited the site.

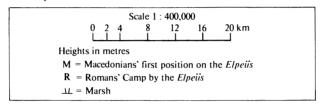
<sup>3</sup> My wife and I spent October 24–26, 1981, walking over the area which is bounded by Makri Yialos, Kitros, Sevasti and the coast.

<sup>4</sup> This identification was suggested by L. Heuzey and H. Daumet, *Mission archéologique de Macédoine* (Paris 1876) 241, with a confused description, but it went out of favour. Pritchett 153 ff. revived it strongly, when he and R. Stroud visited the site, and his Pls 134–6 show Heuzey's plan, a view south from the southern part of



Map 1. The turning movement by Scipio Nasica, and Kromayer's position of the two armies after it.

Based on the map of the Greek Statistical Service, 1963. Drawn by the author.



To the north of the acropolis many tombs have been found where there is a grove of pines; and other tombs have been reported on the headland to the south of the Karagats river. These indicate the extent of the inhabited area, for they presumably lie just outside it. The cemeteries and also the toumbas (mounds covering Macedonian built tombs) reveal the line of the coastal road, which is easier than any inland road running northwards from Katerini. The inhabited area is considerably larger than that of the acropolis. It was probably walled in 317–316 BC, because Cassander is said to have built a palisade 'from sea to sea's as a form of circumvallation, and because many sling-stones of lead, fired probably during that siege, have been found at a considerable distance from the acropolis in a hollow west of the railway guardhouse (phylakeion). See MAP 2. In any case Pydna in 168 BC was a large, strongly fortified city on the main road along the coast. After the battle Aemilius Paullus moved his camp 'nearer to the sea by Pydna' (L. xliv 45.4 propius mare ad Pydnam), which had prepared itself to withstand a siege. This passage by itself suggests that Pydna stood on the coast in 168.

The position which Perseus held during the first part of 168 was on the west bank of the Elpeüs river, so strong in itself and so well fortified that Aemilius despaired of carrying it by a frontal assault. Perseus' position was well chosen for purposes of supply also, for it was only five Roman miles from Dium, a large and well fortified city (L. xliv 8.5),<sup>7</sup> and there was good pasture for his horses in the swampy land near Dium. Aemilius misled Perseus into thinking that a Roman force was about to be landed on the coast in his rear; and in the meantime Scipio Nasica

the acropolis, and a view of the elevation 56 from the south. However, on his map of the battle area (p. 157) he placed Pydna inland east of Kitros and showed nothing at elevation 36. P. M. Petsas in *The Princeton Encyclopedia of Classical Sites* (Princeton 1976) supported Heuzey's identification; but he put the port of Pydna far away from its walled circuit at Cape Atheridha, where there is a modern artificially constructed harbour. It was essential to go over the ground again.

<sup>5</sup> The natural meaning of these words would be from the beach near the Achilleion Hotel to the beach by the mouth of the Karagats river, in which I was told by a villager that large stakes have been found. The space between the Hotel and the river mouth is dominated by high cliffs. If Cassander had aimed to enclose only the acropolis, he would have made a much smaller circuit from cliff to cliff.

<sup>6</sup> I was shown some from this place; they were plain, but I was told that others were inscribed with Greek letters, e.g., AN and MEPNA.

<sup>7</sup> Perseus had used Dium as his base in 169; see Zonaras ix 22, reading  $\Delta l \psi$  for  $l \delta l \psi$ .

set off secretly on a turning movement. His orders were to take the pass of which Aemilius had learnt, 'through Perrhaebia past Pythium and Petra' (Plut. 15.2).8 See MAP 1.

When news of this turning movement reached Perseus, he withdrew northwards in order not to be caught between the two Roman forces. He retired, therefore, to somewhere north of the exit of the Petra pass, which enters the plain at Katerini. That, at least, is my understanding. On the other hand, Kromayer and all who follow him have placed Perseus' new position to the south of Katerini and only ten km north of Dium, so that his rear and his lines of communication and supply were still open to attack from Roman forces using the Petra pass. In addition, if Perseus was stationed there between the Mavroneri and the Pelikas, he had no immediate base of supply; and once Aemilius advanced from the south and confronted Perseus across the Mavroneri, the position of Perseus could be turned on the seaward side where the plain is open and extensive and the Roman fleet could support an advance and land reinforcements. It is difficult to think of a more disadvantageous position.

No ancient source suggests that the battle was fought at or near the mouth of the Petra pass and much closer to Dium than to Pydna. The evidence of the sources is unanimous to the contrary. Plutarch says that Perseus found himself compelled to 'stand firm there in front of Pydna and make trial of battle' (Plut. 16.5 αὐτοῦ δ' ὅμως πρὸ τῆς Πύδνης ὑπομένοντα  $\pi \epsilon i \rho \hat{a} \sigma \theta a i \mu \dot{a} \chi \eta s \dot{a} \nu a \gamma \kappa a \hat{i} \nu \kappa \tau \lambda$ ). What Plutarch meant by 'there in front of Pydna' was close to Pynda, because he has Perseus ride into Pydna and sacrifice there at the start of the fighting (19.4).10 Nor was this sacrifice just Plutarch's idea; for he is citing Polybius as his authority for it (19.4; cf. Plb. xxix 17.5). Perseus has to be more or less as close to Pydna as I have shown him on MAP 3. Strabo, drawing very probably on Polybius as elsewhere in book vii (322 C) defines the position more precisely: 'it was in the plain before Pydna that the Romans defeated Perseus . . . and it was in the plain before Methone that Philip lost his right eye during the siege of the city' (vii fr. 22  $\epsilon \nu \mu \epsilon \nu$  oûv  $\tau \hat{\omega} \pi \rho \hat{\sigma} \tau \hat{\eta} s \Pi \nu \delta \nu \eta s \pi \epsilon \delta i \omega$  'Pwhaloi . . .  $\epsilon \nu \delta \hat{\epsilon} \tau \hat{\omega} \pi \rho \hat{\sigma}$ της Μεθώνης πεδίω γενέσθαι συνέβη Φιλίππω). In each case Strabo is thinking of a plain in front of a city, not of a plain some fifteen km away. Finally Zonaras ix 23 leaves us in no possible doubt. 'Perseus abandoned the fortified position by the river [the Elpeüs] and hastening to Pydna encamped in front of the city' (τό τε ἔρυμα τὸ πρὸς τῷ ποταμῷ ἐξέλιπε, καὶ πρὸς τὴν Πύδναν  $\dot{\epsilon}\pi\epsilon_{i\chi}\theta\epsilon_{i\varsigma}\pi\rho\dot{\delta}\tau\hat{\eta}_{\varsigma}\pi\dot{\delta}\lambda\epsilon\omega_{\varsigma}\dot{\epsilon}\sigma\tau\rho\alpha\tau\sigma\epsilon\dot{\delta}\epsilon\dot{\nu}\sigma\alpha\tau_{o}$ ). The source of Dio Cassius, whom Zonaras was epitomising, is usually held to be Polybius for this section. If so, Polybius' placing of the scene of the battle is beyond doubt. If not, Zonaras provides independent evidence in support of the location which Polybius very probably gave. Pydna was an ideal base of supply for Perseus in this position. The accounts of the subsequent battle all mention 'the plain'. On coming north Perseus chose his ground and began to deploy his forces, 'intending to meet the Romans immediately upon their approach' (Plut. 16.7). The ground consisted of 'a plain for the phalanx' and 'continuous ridges for the light-armed' (16.8). The tent of Aemilius, later, faced 'towards the plain and the camp of the enemy' (17.13); the phalanx at first 'was filling the plain with the glitter of its armour' (18.8), and at the end the corpses 'were covering the plain and the lowest slopes' (21.6 τὸ μὲν πεδίον καὶ τὴν ὑπώρειαν καταπεπλησθαι νεκρῶν). The distinction between 'the plain' and 'the lowest slopes' means that there were slopes rising up from the edge of the plain.

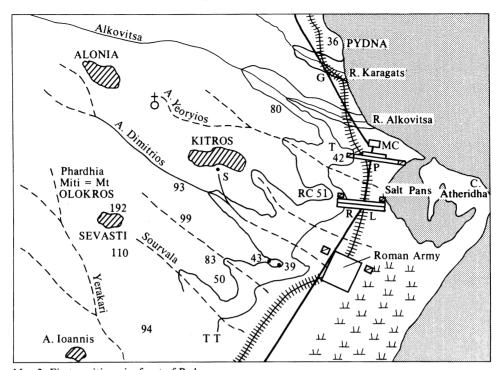
<sup>8</sup> In 1978 I travelled by bus over this pass, starting from Katerini and ending at Elassona. See Kromayer Map 7.

Map 7.

9 The force of Scipio Nasica—or any supporting force—could have proceeded from the Petra pass to the region of Katerini and appeared in the rear of Perseus' new position, as it is sited by Kromayer and Pritchett.

10 Such sacrifice was normal after any unusual natural phenomenon, such as an eclipse, or before joining battle. Aemilius began sacrificing at dawn (Plut. 17.11). Perseus sacrificed presumably at dawn, as

Alexander the Great did daily, and it seems he had ridden to Pydna for the purpose. Polybius, being Plutarch's source (Plut. 19.4), relates that Perseus rode off to the city as the battle was beginning, in order to sacrifice to Heracles; one wonders whether Polybius has moved the time of Perseus' sacrifice in order to make a contrast between Perseus being absent and Aemilius praying as he went into action (Plut. 19.6). The point, however, is that Polybius thought that Perseus was within easy riding distance of Pydna.



Map 2. First positions in front of Pydna.

The man is based on Mans of Greece, sheet Katerini, published by

The map is based on Maps of Greece, sheet Katerini, published by the War Office, in 1944. Drawn by the author.

|  |                                 | Scale     | 1:100,000   |              |               |
|--|---------------------------------|-----------|-------------|--------------|---------------|
|  | = Seasonal stream               | 0<br>L    | 1           | 2<br>        | 3 M           |
|  | = Constant stream               | 0         | 1 2         | 3            | 4 5 Km        |
| . ———  | = Probable line of ancient road | L         |             |              |               |
| <del>                                     </del> | = Railway line                  |           |             |              |               |
|  | Contour interval 25 m           | R L       | = Roman lir | ne facing th | ne enemy      |
| +  | Heights in metres               | R C       | = Roman car | mp formin    | g on foothill |
| 0  | = Church of A. Yeoryios         | S         | = Spring    |              |               |
| G  | = Guardhouse by the railway     | T         | = Toumba    |              |               |
| МС   | = Macedonian camp               | Ø         | = Cavalry   |              |               |
| P  | = Macedonian battle-line        | $T\Gamma$ | = Marsh     |              |               |

According to Livy Perseus awaited the Romans in a *campus patens*, 'a wide, open plain' (xliv 36.11). Such a plain 'in front of Pydna' is not far to seek, for there is only one plain in the vicinity of Pydna, and it lies on the southern side of the city. From the point of view of Perseus in retreat and of the Romans advancing from the Elpeüs river this plain was 'in front of Pydna'.

The ancient road in 168 BC ran from Dium to Pydna near the coast through the plain (see MAP 2). Its course is marked by a succession of toumbas, two north of Korinos, one on point 42 and another (off the maps) on point 56 (by Makri Yialos). The coastal plain narrows in the area between the stream of Ayios Dimitrios and that of Ayios Yeoryios, and becomes small between the toumba on point 42 and the salt-pans. Perseus, then, encamped somewhere in the narrowing part of the plain, and in order to meet the Roman army at once on its approach from the south he deployed his forces (Plut. 16.7). Thus, they faced south. Meanwhile Aemilius, having joined forces with Scipio, was 'coming down' ( $\kappa \alpha \tau \epsilon \beta \alpha \iota \nu \epsilon$ , i.e. into the plain to use the coastal road) and was advancing towards the enemy. He was surprised by the sight of Perseus' army. He deployed hastily from column into line, diverted some rearward troops to form a camp and then withdrew his whole army into it. Plutarch 17.1–6 and Livy xliv 36–7 describe this operation in similar terms, and Livy makes the additional point that Aemilius got his troops on to ground

which was 'unsuitable for the phalanx'. Thus Aemilius moved up on to the foothills; and it was from somewhere in the foothills that he looked out from his tent 'towards the plain and the camp of the enemy' (Plut. 17.13  $\pi\rho\dot{\delta}s$   $\tau\dot{\delta}$   $\pi\epsilon\delta\acute{\delta}i$   $\kappa\alpha\grave{\iota}$   $\tau\dot{\eta}\nu$   $\sigma\tau\rho\alpha\tau\sigma\kappa\dot{\delta}\epsilon\acute{\iota}$   $\alpha\nu$   $\tau\dot{\omega}\nu$   $\pi\delta\lambda\epsilon\mu\acute{\iota}$   $\omega\nu$ ).

The move of Aemilius on to the foothills compelled Perseus to deploy his battle-line with a new orientation, facing not south but west towards the foothills. The line of Aemilius, matching that of Perseus, now faced east and even east-south-east. Such an orientation is indeed required by an important passage in Plutarch. On the day on which the battle took place Aemilius, we are told, waited deliberately until the afternoon 'for the sun to pass its zenith and to swing round, so that his men on going into action would not have the sun shining in their faces [as it would have done] in the morning' (17.13  $\tau \dot{\eta} \nu \dot{\alpha} \pi \delta \kappa \lambda \iota \sigma \iota \nu \kappa \alpha \dot{\iota} \pi \epsilon \rho \iota \phi \rho \dot{\alpha} \nu \dot{\alpha} \iota \alpha \mu \epsilon \nu \omega \nu \tau o \dot{\iota} \phi \omega \tau o \dot{s}$ ,  $\ddot{\delta} \pi \omega s \mu \dot{\eta} \kappa \alpha \tau \dot{\alpha} \pi \rho \sigma \sigma \dot{\omega} \pi \sigma \upsilon \mu \alpha \chi \sigma \iota \dot{\epsilon} \dot{\epsilon} \omega \theta \epsilon \nu \dot{\delta} \ddot{\eta} \lambda \iota \sigma \dot{\epsilon} \dot{\epsilon} \nu \iota \lambda \dot{\epsilon} \mu \pi \sigma \iota$ ). This makes sense only if Aemilius' line had the eastern and southeastern sunshine in its eyes throughout the morning. In other words it was drawn up facing east to south-east (see MAP 3).

We have still some geographical features to consider. The silt from the mouth of the Haliacmon is carried southwards. Some of it is deposited off Ancient Pydna according to the fishermen, and some of it is deposited around C. Atheridha, where the salt-pans are. In 168 BC the surface of the sea was probably some five feet lower than it is today, <sup>12</sup> and the plain by the railway line was that much more above sea level. Even so it may have extended less far to the east at that time. And in contrast to conditions today and in 1944, the time of the War Office Map 1:100,000, the eastern part of the plain was not marshy, because the elephants were able to trample on those Macedonians who, having fled into the sea, turned back and landed (L. xliv 42.6). For similar changes in the coast by Dium see *HMac*. 125.

In order to study the terrain we walked from the village of Sevasti to the top of the hill, crowned with pines, which is called by the villagers Phardhia Miti ('Broad Nose') and on the War Office Map Arbauti (see MAPS 2 and 3). It is the highest point in the vicinity, being 192 m above sea level. From it two long ridges, ending in point 43 and point 50, run down towards the plain in a southeasterly direction. PLATE Ia, taken from below point 192, shows the ridge running down to point 43. We followed the northern of the two ridges for some way and then descended into the valley of the Ayios Dimitrios, which has increasingly steep sides and at the bottom is quite difficult to cross. At the end of what had been an exceptionally dry six months there were considerable pools of water in the valley and there was some flow in the stream. From this point we ascended to the village of Kitros and found on its south side a strong spring of water. The village of 1,800 to 1,900 persons sprawls over a wide area of uneven, hilly ground, and from it a long ridge runs down from the northeast side towards the plain. We followed this ridge to its last rise at point 51. PLATE Ib, taken from point 51, shows the toumba at 42 on the left on the spur of the fourth ridge and the salt-pans on the right. We crossed the plain below to the railway line, crossed the dry valley of the Ayios Yeoryios and walked up to the toumba at 42. The four ridges which we have mentioned are nearly flat-topped and they descend gently towards the plain; they run more or less parallel to one another and are of almost the same height. They consist of the rich soil which has given Pieria its name, and in this age of the tractor they are all ploughed (PLATE Ia).

These ridges correspond to the description by Plutarch of Perseus' chosen position. 'The region . . . was both a plain for the phalanx, which needed level footing and even ground, and continuous ridges, one after another, affording for the light-armed skirmishers room for withdrawals and encircling tactics' (16.8 ὁ δὲ τόπος . . . καὶ πεδίον ἢν τῆ φάλαγγι βάσεως ἐπιπέδου καὶ χωρίων ὁμαλῶν δεομένη καὶ λόφοι συνεχεῖς, ἄλλος ἐξ ἄλλου, τοῖς γυμνητεύουσι καὶ ψιλοῖς ἀναφυγὰς καὶ περιδρομὰς ἔχοντες).

On the next day we walked from Makri Yialos to the toumba at 42 and then along the plain, with deviations on this and that side of the railway line, to as far as the ridge-end south of the

<sup>11</sup> The contrast is between morning (not dawn) and afternoon in  $\tilde{\epsilon}\omega\theta\epsilon\nu$  and  $\pi\epsilon\rho$ i  $\delta\epsilon i\lambda\eta\nu$ , when in fact the battle did begin.

12 This being a general rise in the Mediterranean (see HMac. 145 with n. 2).

Ayios Dimitrios stream. Plate Ic looking north from toumba 42 shows the Acropolis of Pydna as a bluff overhanging the sea. The area west of the line is almost all rich alluvial plain, the alluvium having been washed down from the ridges as well as from the valleys. Plate Id looking south from toumba 42 shows the alluvial plain of the Ayios Yeoryios valley and the main plain on the left. Point 51 is seen on the ridge top left of centre. This plain extends westwards into the valley-bottoms, narrowing as it does so; for example, it forms an acute-angled triangle as it reaches into the mid-valley of the Ayios Dimitrios, and again into the mid-valley of the Ayios Yeoryios. But between these two streams the plain hits rising ground quickly (PLATE Ia). To the east of the railway line there is only one piece of arable land, with crops and vines, where the outflow of the Ayios Dimitrios has carried alluvium farthest. Otherwise the whole area to the east is used only for pasturing flocks of sheep. It is rightly called 'prairies' on Heuzey's map.

Erosion since 168 BC has perhaps softened the slopes of the ridge tops and made the valley bottoms less V-shaped. It has made the plain somewhat higher in relation to the hills and the sea, but it has not affected the levelness of the plain. Deep ploughing with tractors, even of ridge tops and steep slopes, has caused the open soil to absorb much of the rain and made the streams low. In 168 BC, when there was no such ploughing but much more woodland and pasture, the rain ran off the hillsides and increased the flow of the streams. At the same time irrigation by the diversion of stream-water was less highly developed than it is today; and it is probable that streams then carried water through the plain, whereas today the stream-beds in the plain are dry except in periods of heavy rain.

### II. THE ACCOUNTS OF KROMAYER AND OTHERS (MAP I)

When Kromayer writes about the turning movement, he makes the assumption (for which he cites no evidence) that once in possession of Pythium Scipio did not try to get possession of the pass at Petra but turned off the main route and took a track via Vrondi to Kalivia Fteri, some eight km from Perseus' camp. Scipio thus put himself between the Macedonian garrison at Petra and the main army—not a desirable position. This assumption runs counter to the aim of Aemilius, who wanted Scipio to capture the pass through Perrhaebia past Pythium and Petra (Plut. 15.2  $\pi \alpha \rho \dot{\alpha} \tau \dot{\gamma} U \theta \nu \kappa \alpha \dot{\nu} \tau \dot{\gamma} \nu \Pi \epsilon \tau \rho \alpha \nu$ ); and it makes little sense to leave the narrowest and most easily held part of the pass in the hands of the enemy. In addition Scipio was putting his force at risk by bringing it so close to an army five times larger (this on Kromayer's numbers).

The ancient tradition is much to be preferred to Kromayer's invention. Scipio went through the whole pass and the effect of the news that he had done so is given by Zonaras ix 23: Perseus was afraid that Scipio might attack him in the rear<sup>13</sup> or even gain possession first of Pydna, for the Roman fleet at that time was coasting along the shore ( $\mathring{\eta}$  καὶ τὴν Πύδναν προκατάσχη, καὶ γὰρ τὸ ναυτικὸν ἄμα τὸ τῶν Ῥωμαίων παρέπλει). On realising these possibilities Perseus abandoned his position by the Elpeüs and retired (Zonaras *ibid.* and Plut. 16.4 ἢγεν ὀπίσω). It was only after Perseus had retired and had adopted a new position that Scipio and Aemilius joined forces according to Plutarch (16 fin. and 17.1). On the dispositions which Kromayer and Meloni 374 envisage (see Kromayers' map 7) Perseus was very foolish to let Scipio sit in safety at Kalivia Fteri; <sup>14</sup> and later when Perseus did retire he was foolish not to mop up Scipio's much smaller force.

Kromayer's argument for placing the position of Perseus south of Katerini runs as follows.

(as if that was Scipio's task). This assumes a most improbable inactivity on Perseus' part. Livy is clearer: he makes Aemilius say that he had driven the enemy garrisons out of the pass and opened a new way into Macedonia (xliv 39.9 saltu deiectis hostium praesidiis novum iter aperui).

<sup>&</sup>lt;sup>13</sup> Not, I take it, at once but in concert with Aemilius. The fleet could act as a go-between.

<sup>&</sup>lt;sup>14</sup> Pritchett, who, like Meloni 369, adopts Kromayer's positions, differs in that he brings Scipio through the Petra pass, that is past Petra itself, and then has him slip past Perseus' entire army to rejoin Aemilius

Since the sources say that Perseus took up position 'before Pydna', he did not retire 'as far as Pydna' (310 'nicht bis Pydna'); ergo his position was in the plain of Katerini. This is a non sequitur, for he disregards the plain between Katerini and the salt-pans. His next argument arises from the Leucus river having run red with blood. He says that there is no river with water in the plain in June except the Mavroneri, and in consequence that Perseus must be placed just north of the river. He does not even mention the Ayios Dimitrios. Also he assumes that the conditions in 168 BC were as they are today. Next, since Plutarch mentions two streams in the area of the plain and the foothills (16.9), Kromayer takes the Pelikas as his second stream. Because the Mavroneri and the Pelikas join their waters well inland, Kromayer has to put the position of Perseus on the ground before the confluence. 15 Then he puts the Romans on the south side of the Mavroneri. Thus the number of streams between the armies is reduced from two to one, but this does not prevent him from calling both streams 'Fronthindernisse' for Perseus (313).16 He has thereby given Perseus hardly any plain to manoeuvre in, and he has rendered it impossible for him to advance except by making his phalanx cross the Mavroneri in the face of an enemy who is on higher ground—an unenviable task.<sup>17</sup> In the event the Macedonian phalanx advanced faster than the Romans and inflicted the first casualties only 370 m from the Roman camp (Plut. 18.9); it is difficult to see how this was achieved, when we look at the maps of Kromayer and of Meloni 394.

The Roman battle-line in Kromayer's plan, as in those of Meloni and Pritchett, faces north-northeast. Thus the sun was behind them from 8.00 a.m. onwards. It makes no sense to say that Aemilius waited until the afternoon in order that his men might not have the sun in their eyes. If we attach any value to this piece of the ancient evidence, we must find Kromayer, Meloni and Pritchett to be in error. <sup>18</sup> The 'continuous ridges' are not located by Kromayer in his text, and the only ridges on his map are on the Roman side of the river. <sup>19</sup> He does not attempt to explain how Perseus was able to sacrifice at Pydna some eighteen km away from his battle-line when the fighting began.

Pritchett does not use the same arguments as Kromayer to dispose of the words 'before Pydna'. His argument is that the words are 'ambiguous' (161). The alleged ambiguity cannot lie in the words themselves, which are crystal clear. Rather it lies in Pritchett's interpretation of them. 'The difference', he writes, 'between four and eight miles is a relative matter; and no one has proposed to site the battle at the very walls of Pydna.' In fact the distance from his battlefield to Pydna is eleven miles. The distance is 'relative', I suppose, to one's means of locomotion. For anyone on foot, or for a cart carrying supplies, or for Perseus on horseback the difference between eleven miles and two miles, if we take the northern end of the plain, is very substantial. It is, in my opinion, decisive against Pritchett's location of the battle.<sup>20</sup>

Some earlier scholars placed the battle between Katerini and Korinos. Leake and Bursian in particular put the fighting on the ridges between the two villages of Ayios Ioannis. But Kromayer's arguments against them carried the day.<sup>21</sup> And some of the objections which apply to his location will apply to theirs also.

wing of the position which he gives for Perseus' army. Meloni 372 translates  $\lambda \delta \phi o \iota \sigma v \epsilon \chi \epsilon \hat{\iota} s$  as 'una catena di colli'; he does not explain where they were.

<sup>&</sup>lt;sup>15</sup> In this position Perseus' army could be by-passed by the Roman army advancing along the wide coastal plain with the Roman fleet in support, or it could be taken in the rear by a Roman force using the Petra pass, whether that of Scipio or another. See Kromayer Map 9.

<sup>&</sup>lt;sup>16</sup> And behind his camp in Kromayer-Veith, Schlachtenatlas, Röm. Abt. 10.3.

<sup>&</sup>lt;sup>17</sup> See Pritchett's photographs of the Mavroneri (pls 132, 133); and Meloni's plan on p. 394, showing its tortuous course.

<sup>&</sup>lt;sup>18</sup> Kromayer 315–16, Meloni 380 n. 3 and Pritchett 152 n. 33 seem unaware of the difficulty.

<sup>&</sup>lt;sup>19</sup> Pritchett 158 offers only one ridge beyond one

<sup>20</sup> Walbank 384 f. has some objections to Kromayer's location of the battle but he accepts it as 'the most likely'. He repeats an argument by Pritchett 161 that Kromayer's position for Perseus might have been on the boundary between the territories of Pydna and Dium (improbably if one looks at a map). This argument is stultified by the use of  $\Pi \dot{\nu} \delta \nu \eta s$  and not  $\Pi \nu \delta \nu \alpha \dot{\iota} \alpha s$  (cf.  $\Pi \epsilon \lambda \lambda \alpha \dot{\iota} \alpha s$  in Str. vii fr. 20) and by the express mention of  $\pi \dot{\iota} \delta \lambda s$  in Polybius as cited by Plutarch and in Zonaras.

<sup>&</sup>lt;sup>21</sup> Kromayer 311 f. referring to W. M. Leake,

### III. PLUTARCH'S ACCOUNT OF THE DEVELOPMENT OF THE BATTLE (MAPS 2 AND 3)

Although an analysis of the sources is important for any judgement of Perseus and of the Roman commanders, it is less so for descriptions of topographical features, which, whatever the literary source, must have come from the participants in the battle.<sup>22</sup> As my main concern is with the topography, I begin without more ado with the only continuous narrative, that of Plutarch, and I add my comments in brackets.

Plut. 16.1—7. When the survivors of the Macedonian force defending the Petra pass reached Perseus, he broke camp at speed and 'led his army back' [i.e. northwards] in a panic with his hopes confounded. 'However, it was necessary for him to stand firm there in front of Pydna and make trial of battle.' One of Perseus' friends encouraged him by saying that his army was superior in numbers. 'So Perseus pitched camp, began to draw up for battle, reconnoitred the ground and arranged the senior commands, intending to meet the Romans immediately on their approach.' [As we noted above, Perseus chose the best place 'in the plain before Pydna', that is where the plain narrows. His camp, fortified in the Macedonian manner, was presumably on the Pydna side of this place, and his line of battle was arrayed to the south of the camp in the plain where it was confined between toumba 42 and the coast, 23 so that its flanks could not be turned by the Romans: PLATE Id.]

16.8–9 [The text has a lacuna after  $\delta \tau \delta \pi \sigma s$ , but restorations such as 'the place was suitable because' do not affect the sense of what is left.] 'The place . . . consisted of both a plain for the phalanx which needed level footing and even ground, and continuous ridges, one after another, affording for the light-armed skirmishers room for withdrawals and encircling tactics. In between [i.e. between the Macedonian army and the Roman army approaching from the south]<sup>24</sup> there flowed two streams, the Aeson and the Leucus, which though not very deep at that time, which was past midsummer day, seemed likely to provide some difficulty all the same for the Romans.' [We have already described the plain and the ridges. See MAP 2. The streams flowing 'in between' are respectively the Ayios Dimitrios and the Ayios Yeoryios. They were named in the order in which the approaching Roman army would encounter them. 'The place' was described from the point of view of Perseus, who intended 'to meet the Romans immediately on their approach'. The position of the approaching army is shown on MAP 2. The mention of difficulty for the Romans suggests that Perseus intended to let the Romans advance right up to his own position.]

17. Aemilius and Scipio joined forces [evidently in the foothills, as Scipio kept clear of Perseus' retreating army]. Aemilius 'descended' [into the coastal plain] in formation towards the enemy. He halted on seeing the enemy phalanx already in order and in close formation  $(\phi \dot{\alpha} \lambda \alpha \gamma \gamma \alpha \sigma \nu \nu \tau \epsilon \tau \alpha \gamma \mu \dot{\epsilon} \nu \gamma \nu \dot{\eta} \delta \eta \kappa \alpha \dot{\iota} \sigma \nu \nu \epsilon \sigma \tau \dot{\omega} \sigma \alpha \nu)$ . Rather than engage, he manoeuvred his army on to the foothills and made his fortified camp  $(\tau \dot{\nu} \nu \chi \dot{\alpha} \rho \alpha \kappa \alpha)$ . That night there was an eclipse [it dates the battle to June 22 168 BC]. He made sacrifice that night to the moon and next morning to Heracles, but he did not obtain a favourable omen until the twenty-first beast had been slain; and it was favourable only if the Romans remained on the defensive  $(\dot{\alpha} \mu \nu \nu \nu \mu \dot{\epsilon} \nu \nu \iota s)$ . So having arranged his line of battle, Aemilius waited until the afternoon [see above for the position of the sun] and in the meantime he sat in his tent which 'faced the plain and the camp of the enemy'.

Travels in Northern Greece (London 1835) iii 433; and C. Bursian in RhMus xvi (1861) 424, reviewing Heuzey 156.

cavalry and the light-armed. That the camp of Aemilius was well back from the sea is apparent from the comment in L. xliv 45.4 that after the battle Aemilius moved his camp 'nearer to the sea'.

<sup>24</sup> διὰ μέσου δὲ ποταμοὶ βέοντες. We may compare X. An. i 4.4 διὰ μέσου δὲ βεῖ τούτων ποταμός, 'in between them [i.e. two fortifications] flows a river'. Here we have to understand 'the two armies'. See LSJ s.v. μέσος III d.

<sup>&</sup>lt;sup>22</sup> Walbank 378 makes a good assessment of the sources. The primary sources had access to the participants, and Polybius in particular knew Aemilius.

<sup>&</sup>lt;sup>23</sup> The distance from the foothills to the coast might then have been some two km. The foothills themselves were suitable for the deployment of the Macedonian

The first need for the Roman camp was water, and this was available from the spring on the south side of Kitros<sup>25</sup> and from the Ayios Dimitrios. A rising hill was appropriate for defence, and if we put Aemilius' tent at point 51 it commanded a view of the plain and of the Macedonian camp. As we learn later, the first casualties of the battle fell only two stades (370 m) away from the Roman camp. Since the engagement began in the plain, this distance brings the Roman camp down to the lower slopes.]

18. The fighting began in the afternoon  $(\pi \epsilon \rho i \delta \epsilon i \lambda \eta \nu)$ . There were at least two versions of the incidents which led to the fighting [Livy gives a variant of Plutarch's first one], but all are so described as to show that the Romans acted on the defensive [in accordance with the omen's condition]. In any case the whole Macedonian line advanced first to the attack, 'filling the plain with the glitter of their arms and the hill country with their shout and uproar'.

The approximate position of the Macedonian line is shown on MAP 3. It is based on the following considerations. Plutarch's totals, 4,000 cavalry and nearly 40,000 infantry, being generally accepted (13.4),27 there were probably 21,000 phalangites (so Walbank 388). If they were in formation 16 deep, they had a front almost 1½ km long. The rest of the infantry, some 19,000, at an average of 10 men deep, had a front of some 2 km. Apart from the cavalry, then, the line was some  $3\frac{1}{2}$  km long.<sup>28</sup> In fact the distance between the ridge-end by the toumba in the north and the ridge-end south of the Ayios Dimitrios in the south is a little short of 4 km. Both armies drew some of their water for men and animals from the same river (no doubt the Ayios Dimitrios); for it was here that the fighting began 'on the Romans' right wing' (L. xliv 41.3). This river was the Aeson of Plutarch. After the victory the Romans advanced and on their way to Pydna crossed the Leucus, 29 i.e. the Ayios Yeoryios. As this stream was then red with blood, there had been fighting in the valley bed, very probably between troops on the Roman left and light-armed Macedonians attacking from the ridge which ends in point 42; for Perseus had intended to use these ridges for his light-armed troops (16.8), and troops were needed on this ridge to protect his line of supply from Pydna.]

19-21. When the swift advance of the Macedonians<sup>30</sup> brought them within two stades (370 m) of the Roman camp, they met the Roman line. The dense array of Macedonian pikes drove the Romans back.<sup>31</sup> Here, though the Romans did not 'flee', 'there was withdrawal towards the hill called Olokros'. [This hill is evidently that which is conspicuous from the battlefield, Phardhia Miti.] Pressing on in pursuit, the phalanx entered 'uneven ground' [the valley sides and the ridge-end], lost the cohesion of its long line [nearly 1\frac{1}{2}\text{ km}], bulged forwards and backwards, and then opened up gaps, into which the more manoeuvrable Roman maniples charged. Once at close quarters the sword, the long shield and the body-armour of the legionary prevailed over the pike, the dagger and the light armour of the phalangite. In the bitter fighting the corps d'élite of 3,000 Macedonians fought to the last man, but in the end the whole centre either fell or fled [Plutarch does not describe the fighting in other parts of the battlefield]. Perseus and his cavalry

 $\pi \alpha \rho \alpha \tau \alpha \xi \in \omega_s$ ) contributed to its disorder in the battle.

<sup>&</sup>lt;sup>25</sup> When Aemilius decided to move his army off the plain, he had a choice of two ridges (see MAP 2). He may well have chosen ridge 51 in order to secure this

important source of water.

<sup>26</sup> Zon. ix 23 has περὶ δείλην γὰρ ὀψίαν ἡ μάχη έγένετο.

<sup>&</sup>lt;sup>27</sup> See Meloni 375 n. 1.

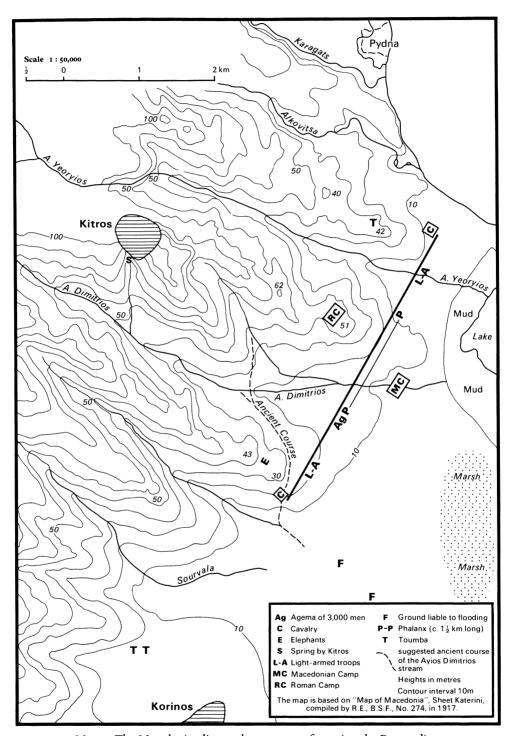
<sup>&</sup>lt;sup>28</sup> Kromayer gave this length for Perseus' line, and again in his Schlachtenatlas, Röm. Abt. 49 'almost 4 km long'. However, he based it on different calculations; for he postulated in the phalanx proper a depth of 32 men on the strength of Front. ii 3.20, who calls it a double phalanx (phalangem duplicem). In my opinion this passage in Frontinus refers to Aemilius' first arrival on the scene and not to the battle itself. Plutarch describes the phalanx in some detail. He never says that it was double, and he does say that its length ( $\tau \delta \mu \hat{\eta} \kappa os \tau \hat{\eta} s$ 

He can hardly have been thinking of a double phalanx.

29 The name  $\Lambda \epsilon \hat{\nu} \kappa o s$  may be explained by the whitish soil which we noticed at one point in the valley of the lower Ayios Yeoryios in walking from the ridge-point 51 to the toumba at 42. This river contained some water in 168 BC but its sluggish flow had failed to wash the bloody water clear by the next day (Plut.

<sup>&</sup>lt;sup>30</sup> Across the plain; not, as in Kromayer's reconstruction, across a river-bed full of water and up a slope, more rapidly than the Romans advanced.

<sup>31</sup> Livy had described this retreat in a passage now lost. He referred back to it at xliv 41.9. The terrifying aspect of the advancing phalanx is described in Plb. xxix 17 and Plut. 19.2.



MAP 3. The Macedonian line at the moment of meeting the Roman line.

The light-armed troops not in the line held the ridges: the Macedonians that between Alkovitsa and A. Yeoryios, and the Romans those between A. Yeoryios and the stream south of A. Dimitrios.

got away intact [he was on the right, nearest to Pydna]. 'The plain and the lowest slopes were filled with corpses, and when the Romans crossed the Leucus next day after the battle its waters were still mixed with blood.' Over 25,000 are said to have been killed. According to Posidonius 100 Romans fell, and according to Nasica 80.<sup>32</sup>

#### IV. Additional Evidence and Some Problems

How long did the campaign take? Speaking in the forum at Rome, Aemilius claimed that between his taking command in Thessaly and his defeating Perseus there were only fifteen days, i.e., June 7 to June 22. We may suggest a probable timetable. Plutarch indicates that Aemilius tightened up discipline and remained inactive for some days (15.1  $\eta\mu\epsilon\rho\alpha s\mu\epsilon\nu\tau\nu\alpha s$ ). Let us say for four days.<sup>33</sup> Then on June 11 he planned the turning movement. While it was being executed by Scipio, he himself, according to L. xliv 35.16–23, attacked Perseus' army at dawn on two days and pretended to launch an attack on the third day, June 14. Scipio had been ordered to attack the enemy position at Pythium between 3.00 a.m. and 6.00 a.m. on the third day, June 14 (L. xliv 35.11–12 and 15).<sup>34</sup>

Was the pass guarded? L. xliv 32.9 (cf. 35.11) says that it was guarded by—(the text is corrupt: see the next paragraph) Macedonian troops 'posted at Pythium and at Petra' (see MAP I). Zonaras says that it was guarded but by a very small force (ix 23 ἐλαχίστην φρουράν). However, according to Plutarch 15.2 the pass was at first unguarded; but when Perseus learnt from a Cretan deserter what was happening, he sent 12,000 troops at speed to occupy the head of the pass (16.2 τὰs ὑπερβολάs), and these fought a sharp action with Scipio, whose force of 8,320 men triumphed. This version in Plutarch has aroused suspicion. He took the number of Scipio's troops from Scipio's own account, yet he noted that Scipio was not in agreement with Polybius, and again for the action on the heights (περὶ τοῖς ἄκροις) he noted another disagreement between Scipio and Polybius, who said that the Macedonian garrison was caught in bed. Zonaras ix 23, whose ultimate source is probably Polybius, stated that 'he' (presumably Scipio, though in the text apparently Aemilius) captured the heights and crossed over the mountains partly by escaping notice and partly by force (καταληφθέντων τῶν ἄκρων νυκτὸς πρὸς τὰ ὅρη ὥρμησε, καὶ πŷ μὲν λαθὼν πŷ δὲ βιασάμενος ὑπερέβαλεν αὐτά).

We should note that the text of L. xliv 32.9 is uncertain. The Codex Vindobonensis gives 'u Macedonum missa ad praesidium, quibus praepositi erant Histiaeus et Theogenes et Midon'. As 'u' stands for V = 5, a word is missing. An edition of the sixteenth century added 'milia', and this has been accepted, e.g. by Kromayer 304 n. 1; but it seems unlikely that Perseus would have allocated so large a force of Macedonians as 5,000 to defend this pass in spring 168 BC or would have kept so many there after the move of Aemilius through the Tempe pass into southern Macedonia. A force of a few hundred seems more likely. In any case they were stationed in more than one place (L. xliv 35.11 praesidiis and praesidia in the plural), and the advanced garrison at Pythium was commanded by Milon (the better form of the name). The size of Scipio's force is given by Plutarch as 8,320. In the corresponding passage the text of Livy in the Codex Vindobonensis is 'quinque delectis', to which Hertz added 'milibus'. This may well be correct, but the reading remains uncertain. On the whole it seems best to accept Zonaras as the indicator of what Polybius wrote, in which case the garrison was 'very small' in relation to Scipio's force,

fleeing opposition. All these aspects are stressed by Plutarch in his account of the battle.

<sup>34</sup> For the discrepancy with Plut. see Walbank 381.

<sup>&</sup>lt;sup>32</sup> For such a disparity in casualties one should compare this battle with the battles of Marathon and Plataea and those of Alexander against the Persians. It is a mistake to dismiss the numbers as 'incredible' or 'propagandist'. One should take into account the nature of the body-armour, the effectiveness of the weaponry and the advantage of men in formation over broken or

<sup>&</sup>lt;sup>33</sup> Zon. ix 23 adds a march by Aemilius through Tempe, a very narrow pass. This should be included in the four days I have suggested.

and to suppose that Livy, who was probably drawing on Polybius at xliv 32, gave the number, now corrupt, of the Macedonians there. Scipio caught the first garrison (Milon's at Pythium) in bed (so Polybius) 'by escaping notice' (Zonaras,  $\lambda a\theta \dot{\omega} \nu$ ), and he fought his way through by defeating in battle the other garrison or garrisons (one being at Petra). Scipio gilded the lily in the letter to Eumenes.<sup>35</sup>

Why did Perseus retreat? In the course of June 14 Perseus knew that the pass had been lost. A considerable enemy force was now about to cut his lines of communication and supply, and the Roman fleet could land troops to increase the force behind his back. Retreat was essential. However, he could not withdraw by daylight, because Aemilius' army was in immediate contact (L. xliv 35.18). But, as he broke camp 'quickly' and withdrew (Plut. 16.4), we may assume that he left during the night of June 14<sup>36</sup> and covered the 24 km to his new position 'in the plain before Pydna' by the evening of June 15 (he was some 2 km from the city wall). Aemilius will have broken camp on the morning of June 15. Meanwhile Scipio had brought his army down<sup>37</sup> to a (probably pre-arranged) meeting place in the foothills in order to keep clear of the main army of Perseus (Plut. 16.3 καταβιβάζων εἶs τὴν χώραν τὸ στράτευμα). The survivors of the Macedonian guard-force had presumably escaped over the hills and rejoined Perseus. Aemilius met Scipio at the rendezvous. Their united forces descended into the plain and followed the coastal road, in the expectation perhaps that Perseus had withdrawn into the fortified city of Pydna.

Why did Aemilius avoid an engagement on making contact in the plain before Pydna? Livy is at pains to justify Aemilius in xliv 36–9, and he introduces two speeches which purport to give Aemilius' reasons. Livy makes much of the day being very hot and the men exhausted by the march and the noonday heat,<sup>38</sup> whereas the Macedonians were rested and fresh (xliv 36.2–7, 40.2). Plutarch provides a similar justification. We may infer that Livy and Plutarch found some of this material in Polybius. The truth of the matter surely is that Aemilius was at fault in not having ascertained in advance where the army of Perseus was, and in marching his army, in column and not deployed, to within reach of the enemy. See MAP 2. As Plutarch says (17.2), he halted in surprise; and as Livy says (36.4), he urged the tribunes to carry out the deployment at speed (cf. 40.2).

If he was marching on the line of the two toumbas of Korinos and then keeping on the level ground between the 20 m contour and the 10 m contour (MAP 3), he would not have seen anyone beyond spur 51 until he arrived on the lowest slope of the spur (near the building on the left in PLATE Id). It was from there, then, that he first saw the army of Perseus deployed and barring his way: 'already in order and in close formation' according to Plut. 17.2 and 4. See MAP 2 and PLATE Ib and d. It is here that Frontinus ii 3.20 comes to our help. He reports that Perseus had cavalry and light-armed troops on each wing and in the centre a 'double phalanx' (phalangem duplicem). Such a phalanx is likely at this time to have been 32 men deep. With some 20,000 men in the phalanx its front was just over 600 m long.

The sight of this massed phalanx halted Aemilius in his tracks. He deployed his army at top speed into a deep formation consisting of three lines. According to Frontinus the legionaries (of the first line) were drawn up in wedge-shaped formations, the point of each wedge facing the enemy; and groups of light-armed skirmishers, placed in gaps between the wedges, made continual sorties ahead of the line (triplicem aciem cuneis instruxit inter quos velites subinde emisit). The purpose of the skirmishers was to deter any attack, and the wedge formations were designed

<sup>&</sup>lt;sup>35</sup> Kromayer 305 n. 1 discusses this matter; see also Walbank 383 f.

<sup>&</sup>lt;sup>36</sup> Meloni 371 has him retire by night.

<sup>&</sup>lt;sup>37</sup> Plutarch's remark that Scipio 'followed safely' the fleeing troops of Milon suggests that he did not meet any further resistance at Petra.

<sup>&</sup>lt;sup>38</sup> Those who fail to notice the lacuna in Livy's text make Aemilius reach his goal at noon of the day on

which he left his position south of the Elpeüs river. For instance, Leake supposed that Aemilius could not have gone farther than Korinos in half a day and so he located the battle near Korinos. Pritchett 160 asserts that Perseus reached his goal at midday; I know no evidence for that, and it is perhaps a slip, Perseus for Aemilius.

<sup>&</sup>lt;sup>39</sup> So Kromayer 323 with n. 1.

to penetrate and break up the phalanx formation, if the phalanx were to charge. While his main body stood in this formation, according to Livy Aemilius ordered his special officers to lay out a camp and place the baggage there. As soon as this was done, he drew off the men of the third line (triarios), then those of the second line, and finally those of the first line (here we find Frontinus' triplex acies). In moving the last he started with the maniples on the right wing (ab dextro primum cornu). As his intention was to avoid opening up a gap within his own front line, it is clear that he was sending these maniples behind the maniples of the front line and so to his left. Thus the camp was on his left. He did not summon the cavalry squadrons from their positions until the rampart and the ditch facing the enemy were completed (L. xliv 37.1–3). It is evident from this operation that the camp was very close to the deployed line and also very close to the enemy. Perseus too withdrew into his camp (L. xliv 37.4 ipse in castra copias reduxit). See MAP 2.<sup>40</sup>

Kromayer made the mistake of applying the passage in Frontinus to the battle itself and not to this preliminary phase (it would of course make no sense for that phase in Kromayer's location, with the Romans on high ground and a river bed between them and the enemy). Since he saw that Frontinus' description of the Roman deep formation in three lines and then of Aemilius' withdrawal on to rough ground was incompatible with Livy's description of the two legions engaging the phalanx in the battle (xliv 41.1–2), he decided that Frontinus was utterly wrong. <sup>41</sup> He simply overlooked the correspondences which we have noted between Frontinus and Livy in describing the approach of Aemilius and his hasty withdrawal.

In fact Frontinus has preserved a better account of that withdrawal than either Livy or Plutarch. <sup>42</sup> In the course of it he tried to justify Aemilius by saying that his purpose in feigning a retreat was to lead the enemy onto rough ground which he had deliberately seized (ut... perduceret hostes in confragosa loca, quae ex industria captaverat). At the time Aemilius' purpose was merely to extricate his army from a dangerous situation as quickly as possible. He could hardly have foreseen then what was to happen some days later.

For the last stage of the withdrawal Frontinus ii 3.20 supplements the summary of Livy, ex statione equites revocati sunt (37.3), with the following sentences: 'Cum sic quoque, suspecta calliditate recedentium, ordinata sequeretur phalanx, equites a sinistro cornu praeter oram phalangis iussit transcurrere citatis equis, tectos, ut objectis armis ipso impetu praefringerent hostium spicula. Quo genere telorum exarmati Macedones solverunt aciem et terga verterunt.' ('When even so the enemy suspected his ruse in retiring and the phalanx was following in good order, he (Aemilius) commanded the cavalrymen on the left wing to gallop across past the front of the phalanx, protecting themselves with their shields so that the points of the enemy's pikes would be broken off by the very shock of encountering the shields. By this tactic the Macedonians were deprived of their weapons, broke formation and fled.')

It seems that Perseus failed to attack at once when the Roman column halted and began to deploy. When the phalanx did advance, it might have caught a part of the front line of infantry on the Roman left but for this manoeuvre by the cavalrymen of the left wing. As they galloped past, squadron by squadron, they caused the phalanx to halt and gave time for the last of the infantrymen to withdraw. But to say that they disarmed the Macedonians is a gross exaggeration: indeed it is unlikely that they came close enough for their horses to be tripped or struck by the infantrymen's pikes.<sup>43</sup>

Was there some delay before the battle occurred? In Plutarch's account the night following

in withdrawal' (for ὑπαγωγή cf. Thuc. iii 97.3). These are the first two parts of Frontinus' triple formation. Plutarch failed to explain how the front part moved off.

<sup>&</sup>lt;sup>40</sup> My positioning of the armies is such that the two back lines could be withdrawn and the camp could be fortified without the Macedonians being able to see from their battle line what was happening.

<sup>&</sup>lt;sup>41</sup> See Kromayer loc. cit.

<sup>&</sup>lt;sup>42</sup> Plutarch's account is best understood in the light of Frontinus. For Plutarch has those in the Roman rear 'turn' and make an encampment, and 'those contiguous to the last' (i.e. to the last of those in the rear) 'move off

<sup>&</sup>lt;sup>43</sup> This part of Frontinus' account can hardly be applied to the battle which ensued some days later; for then it was the cavalry of the Roman right wing which distinguished itself, and there is no mention of action on the Roman left wing.

Aemilius' arrival was marked by an eclipse, and the battle was fought the next day. In Livy too the arrival was immediately followed by the eclipse: neither commander wanted to engage next day (xliv 40.2), but Chance brought on the battle. Here the implication is that the battle was on that next day. But Zonaras ix 23 has a different timing: 'Aemilius also came there [i.e. to the ground before Pydna], but they did not engage at once and indeed waited for not a few days' (ἀλλὰ καὶ διέτριψαν οὐκ ὀλίγας ἡμέρας). The timing is to be preferred. For while Plutarch and Livy wanted to make the victory as dramatic as possible, Zonaras gave a matter-of-fact account. His account is likely to be closer to the account of Polybius. Moreover, time was needed. Aemilius lacked supplies, so that 'a large part of the army left camp to obtain wood and fodder from nearby fields' (xliv 40.2). Perseus had to change his dispositions; for the concentration of all Aemilius' forces against Perseus' right wing raised the danger of encirclement. During the delay of a few days, June 17 to 21, Aemilius organised his supplies from the south, for Perseus placed his army between the Roman camp and the Roman fleet. His own supplies came from the fortified and strongly held city of Pydna. See MAP 3.

The delay reached up to the night of the eclipse. According to Zonaras and Livy Aemilius warned his men of the impending eclipse; not so Plutarch. On the next day an accidental happening led to the battle, on June 22.

Why did Aemilius and Perseus not engage for several days? Aemilius, we may suppose, was unwilling to attack the Macedonian phalanx in its new position on the flat plain, with its flanks protected by cavalry and by light-armed troops, who were perhaps more numerous than his own (MAP 3). On the other hand as Aemilius had chosen to put his line of battle on ground unfavourable to the phalanx because it was uneven (L. xliv 37.11 eo loco signa constituisset quo phalanx, quam inutilem vel mediocris iniquitas loci efficeret, promoveri non posset), Perseus would not leave the plain.

During the days of delay did the two armies stand in lines of battle, facing one another, throughout the hours of daylight? It seems not. Livy and Plutarch both distinguish the drawing up of the troops for battle (above, signa constituisset, and Plut. 17.12  $\pi\rho\sigma\sigma\acute{\epsilon}\tau\alpha \xi\dot{\epsilon}$   $\delta\iota\alpha\kappa\sigma\mu\dot{\epsilon}\hat{\iota}\nu$   $\tau\dot{\epsilon}$   $i\gamma\epsilon\mu\acute{\epsilon}\dot{\nu}$   $i\gamma\epsilon\mu\acute{\epsilon}\dot{\nu}$  i

Where did the accident happen? Plutarch does not mention a stream in this connection. Livy and Zonaras do, and Livy puts the stream on the Roman right wing and 'nearer to the Macedonian camp' (xliv 41.3, 40.4), i.e. than to the Roman camp (MAP 3). On our positioning of

mander, Salvius (20.1); see Meloni 384 n. 4 with references.

<sup>44</sup> Some have identified the horse of the frieze at Delphi with the unbridled horse of Plut. 18.1, and a man hurling a javelin with the heroic Paelignian com-

the armies the stream is the Ayios Dimitrios. Since there were rival troops posted on each bank, the best place for the clash would be where the stream wound round the edge of the ridge, as proposed on MAP 3. The fight for the horse or whatever it was led to more troops becoming involved, namely the Thracians under Alexander, being 800 in number according to L. xliv 40.9, and the Ligurians on the Roman side, being 700 according to Plut. 18.2. Both were light-armed troops, such as might be used to guard an encamped army or intended to hold a position on the wing of a battle-line.

Were the main forces in a battle-line or in camp when the accident happened?<sup>45</sup> It is unlikely that foraging parties or watering parties or baggage animals with grooms were operating in the no-man's-land between two battle lines already standing under arms. Rather, as L. xliv 40.4-6 says, the bodies of light-armed troops were stationed as outposts on either side. 46 That is what emerges too from the account of Zonaras ix 23: 'at first these troops (those near the watering-point) fought by themselves, and then the rest coming to help their own men bit by bit issued from the camps (κατ' ολίγους ἐκ τῶν στρατοπέδων ἐξήεσαν) and everyone became engaged. The battle which ensued was disordered but sharp, and the Romans won.' Plutarch mentions the camps and the movement from them. He had left Aemilius sitting in camp and enjoying the view of the plain and the enemy camp (17 fin.). Part of the plain which he saw is visible in PLATE Ib. When the Thracians and the Ligurians were at one another's throats, 'more troops came up on each side to help', and it was then that the watchful Aemilius 'like a helmsman' saw not the clash itself but 'the commotion of the camps' (18.3 τῷ παρόντι σάλω καὶ κινήματι τῶν στρατοπέδων). He divined the future magnitude of the engagement. He left his tent to address the heavy-armed troops (i.e. they were still in the camp). Scipio rode out  $(\dot{\epsilon}\xi\iota\pi\pi\alpha\sigma\dot{\alpha}\mu\epsilon\nu\sigma s, i.e.$  from the camp) towards those who were engaging one another with missiles (τοὺς ἀκροβολιζομένους). As he did so, he saw 'all the enemy just about to engage' (πάντας ὅσον οὔπω τοὺς πολεμίους ἐν χερσὶν ὄντας). It is thus clear that the heavy-armed troops of both sides were in their respective camps when the fighting began, and that the Macedonians advanced first in full force to the attack (Plut. 18 fin.). The text of Livy does not help us in this matter for there is a large lacuna.

What was the order of battle when the troops did get into position? Scipio, riding from the camp towards his right wing, is the chief informant (Plut. 18.4).<sup>47</sup> He saw enemy troops while he was on his way: first tall Thracians, then next to them mercenaries and Paeonians intermingled, and next to them a third agema of élite Macedonians. 'Next to them, as they were forming into line, the brigades of the Bronze Shields emerging from the fortified camp (18.8 οἶs καθισταμένοις εἶs τάξιν αἷ τῶν χαλκασπίδων ἐπανατέλλουσαι<sup>48</sup> φάλαγγες ἐκ τοῦ χάρακος) filled the plain with the glitter of their arms.' There was also a force of cavalry on either side of the infantry line (xliv 42.3 interiecta). We find a name for this agema<sup>49</sup> in L. xliv 41.1, caetrati (so-called from their shield resembling a Spanish shield), and also for the troops who came after, i.e. to the right of the Bronze Shields, namely the White Shields. The sources do not mention the troops on the Macedonian right wing, except that Perseus was there in command of the Sacred Squadrons of Macedonian cavalry and that the Odrysian cavalry was with him (L. xliv 42.2). The overall numbers of the Macedonian army were 4,000 cavalry and nearly 40,000 infantry (Plut. 13.4; cf. L. xlii 51.11); the agema numbered 3,000 (Plut. 21.6); and the phalanx brigades came to some 20,000 men.<sup>50</sup>

for this account.

<sup>48</sup> This colourful word is probably in the style of Scipio's writing.

<sup>50</sup> L. xlii 51.3 pars ferme dimidia.

<sup>&</sup>lt;sup>45</sup> This question was much debated by E. Meyer and Kromayer; see Kromayer iv 600 ff. and *Schlachtenatlas*, Röm. Abt. 47 f., and Meloni 380–2.

<sup>&</sup>lt;sup>46</sup> Livy called these forces on both sides *praesidia* and one Roman force specifically *pro castris stativum praesidium*, that is a standing outpost in front of the camp.

<sup>&</sup>lt;sup>47</sup> Although  $\phi\eta\sigma i$  is in a subordinate clause (Plut. 18.5), it indicates that Plutarch was drawing on Scipio

<sup>&</sup>lt;sup>49</sup> There was at least one other agema among the phalangite forces, as the plural is used at Plut. 19.1, τοῦς ἀγήμασι.

The Romans had their elephants on the right wing. Perseus had equipped his men with spiked armour and had tried to train his cavalry-horses to face the elephants, <sup>51</sup> but in the event these devices proved to be of no avail. Some allied cavalry and at least five cohorts of light-armed infantry were also on the Roman right wing (L. xliv 40.5–6). The centre was held by two legions. We hear nothing of the Roman left wing. The total number on the Roman side may have been short of 40,000, if the Romans were inferior in number, as one of Perseus' Friends is reported to have said (Plut. 16.6) and as Livy claimed in a speech of his own creation (xliv 38.5). <sup>52</sup>

The Macedonian forces of the left and the centre, thanks to their rapid advance, were the first to take up position. Then the solid line of sarissa-wielding phalangites (including the agema of 3,000) struck the light-armed Paelignian and Marrucinian cohorts with overwhelming effect. See MAP 3. The Macedonians, using both hands, drove their pikes through the shields and the armour of their opponents, whose attempts to divert the serried pike-points with sword, shield or bare hands were of no effect. Under the pressure the light-armed infantry retired towards the hill Olokros (MAP 2). Then, as Aemilius and the legionaries came up, they were terrified by the spectacle of the thickset hedge of pike-points moving at the word of command, and it is apparent (though the sources do not say so)<sup>53</sup> that the legionaries gave way and withdrew.

The phalanx pressed on in pursuit and thus encountered different kinds of terrain: flat ground, steep valley bottoms and hillside slopes of varying angles. See PLATE Id. Like a roller breaking on an uneven coast, the long line lost its dressing and its cohesion. Aemilius saw his chance. He ordered the legionaries to engage, group by group, wherever there was a gap or some confusion in the Macedonian phalanx. As his men drove their way into and inside the phalanx, they evaded the pike-points and using their long swords and long shields against the daggers and the small shields of the Macedonians began to cut them down from all sides.

Meanwhile, the Macedonian left wing had (presumably) advanced in concert with the left centre. But here the Romans of the right wing delivered a counter-charge. The elephants with the gentle slope in their favour were particularly effective, as Perseus' plans proved useless (L. xliv 41.4). The Roman cavalrymen, whose mounts had been trained to fight alongside elephants, seem to have distinguished themselves in the action.<sup>54</sup> It was here that the Macedonians first fled (xliv 41.3). The Macedonian cavalry, unable to cope with the elephants, galloped round behind the phalanx to their own right wing. The Roman cavalry joined in the attack on the disintegrating phalanx. We know nothing of what happened on the other wing, except that there was fighting in the valley of the Leucus, and that Perseus, in command of the main body of Macedonian cavalry, fled early in the battle.

The phalanx fought on, even though it was outflanked and attacked from the rear. The agema of 3,000, now exposed on its left, fell fighting to the last man. With the dislocation of the phalanx the superior weaponry and the greater expertise in sword-play of the Romans proved decisive. The position of the phalanx, caught between the Roman army and the Roman fleet, and the flight of the Macedonian cavalry led to the enormous losses of Macedonian infantrymen.

The entire action was over within an hour (Plut. 22.1). It is thus apparent that the camps were close to the scene of action and that there was no re-shuffling of the intended dispositions within that single hour. 55 The Romans pursued for a distance of 120 stades (22 km), using what

<sup>51</sup> See Zon. ix 22, Polyaenus iv 21 and L. xliv 41.4. <sup>52</sup> Kromayer 343 f. and his conclusion at 348, and Meloni 375 n. 1. Pritchett 158 is more positive: 'the Roman force numbered 38,000'. If the Macedonians were markedly superior in light-armed troops, we can understand how they hoped to make use of the 'continuous ridges' for their manoeuvres (Plut. 16.8).

<sup>53</sup> Front. ii 3.20 had Aemilius make a feigned retreat in order to draw the Macedonian phalanx on to broken ground (*confragosa loca*); but that was at the time of Aemilius' arrival.

<sup>54</sup> For cavalrymen being prominent on the frieze see Meloni 393. The representation of horsemen is of course traditional in this type of art.

55 Meloni 390, for instance, supposed that Aemilius, having got his army out in battle line and then seen the defeat of his right wing, managed to move the troops of his left wing—namely the Numidian elephants and the allied infantry, 10,000 or so in number—to the right wing by marching them along behind the battle line. When this operation was complete, he had them line up and defeat the successful Macedonian left wing, which

remained of the daylight (22.1), but Perseus escaped into the forest of the Pierian mountains by following 'the military road' (L. xliv 43.1).

Perseus seems to have lost control of the battle as soon as his forces were outside the camp.<sup>56</sup> Aemilius, on the other hand, fought at the head of the first legion, and it was he who gave the orders to the commander of the second legion to attack, to the right wing to charge and to the legionaries to attack in small groups, wherever there were gaps in the phalanx (L. xliv 41.1–3; Plut. 20.8). When the city of Pydna surrendered, Aemilius gave it to the troops to plunder.<sup>57</sup>

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had apparently failed to follow up its own victory. The march alone over 4 km of broken ground with elephants and so large a force of men would have taken an hour. Meanwhile it appears that Perseus failed to get his cavalry even into position, let alone exploit the total lack of opposition to his own wing! Time and space, let alone probability, do not allow for such suppositions, which rest in this case on nothing more than L. xliv 41.3, where Aemilius 'brings the elephants and the allies' squadrons onto the right wing where the battle had been joined by the river' (alias being emended to alas).

<sup>56</sup>One feels that a more capable king would have led his phalanx, as Philip II did against Bardylis and at Chaeronea, and as Alexander III did at Issus in my opinion (see Hammond, Alexander the Great: King, Commander and Statesman [London 1981] 104). If Perseus planned to make a devastating charge with his excellent cavalry, his plan did not materialise. Some of the questions about Perseus and the Macedonian tactics are considered by P. K. Gyioka, Περσεύς: ὁ τελευταΐος βασιλεύς τῶν Μακεδόνων (Thessaloniki 1978) 397 f.; he accepts Kromayer's location for the battle.

<sup>57</sup> One man in Pydna hid his treasure successfully; for a hoard of Perseus' silver coins was found in excavating the foundations of a house outside the acropolis but inside what I have suggested was the walled area of the city. The find was made shortly before I arrived, and the coins had been dispersed.

JHS civ (1984) PLATE I



(a) View from below point 192 (Mt Olokros) down the ridge which culminates in point 43 (see MAP 3).



(b) View from Aemilius' position on point 51 (see MAP 2) with the toumba at 42 on the left (above the white house) and the salt-pans to the right. The first position of Perseus was between the two (see MAP 2). A major road is in the immediate foreground.



(c) View from the toumba at 42 towards Pydna with the Acropolis visible as a bluff overhanging the sea (just beyond and left of two trees in line, one behind the other). See MAP 3.



(d) View south from the same toumba with the alluvial plain of the Ayios Yeoryios in the right half, the main plain in the left half, and the ridge ending in point 51 in the background (see MAP 3).



(e) Squeeze of inscription from Marmaris (Physkos) (Photograph Bob Wilkins).

THE BATTLE OF PYDNA (a)–( $\overline{d}$ ) NEW  $NI\Sigma YPIOI$  FROM PHYSKOS (e)